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THE RELATIONSHIP BETWEEN NUTRITION, AGING, AND HEALTH: A PERSONAL AND SOCIAL CHALLENGE

HEARING

BEFORE THE

SPECIAL COMMITTEE ON AGING
UNITED STATES SENATE

NINETY-NINTH CONGRESS

FIRST SESSION

ALBUQUERQUE, NM

DECEMBER 14, 1985

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THE RELATIONSHIP BETWEEN NUTRITION, AGING, AND HEALTH: A PERSONAL AND SOCIAL CHALLENGE

SATURDAY, DECEMBER 14, 1985

U.S. SENATE,
SPECIAL COMMITTEE ON AGING,
Albuquerque, NM.

The committee met, pursuant to notice, at 10 a.m., in the board room, Albuquerque School, 717 University, Southeast, Albuquerque, NM, the Honorable Jeff Bingaman, presiding.

Present: Senator Bingaman.

Staff present: Faith Roessel, Bill Benson, and Becky Bustamante.

OPENING STATEMENT BY SENATOR JEFF BINGAMAN, PRESIDING

Senator BINGAMAN. I want to welcome you all here to this committee hearing. It's a hearing sponsored by the Senate Special Committee on Aging, of which I am privileged to be a member.

I would first like to thank Senator John Heinz and Senator John Glenn, who are the chairman and ranking member of that Senate committee, for authorizing us to hold this hearing today. I think it's a continuation of the hearing I held last year in Albuquerque and also a continuation of hearings that the Special Committee on Aging has had in various other forums, particularly in Washington.

Let me also, at the beginning, thank the staff people who have worked so hard on this: Bill Benson—who will be joining us—is a staff person with the Committee on Aging. He's here today to help us and has done a lot of the legwork in getting this organized. We appreciate that.

On my staff, Faith Roessel has taken the main responsibility on this: Becky Bustamante, Delores Garcia, Elizabeth Giagos, and Vince Murphy, all of them have worked at making this hearing happen today. I think Faith, in particular, has worked very hard in getting this to occur so I want to thank her.

Let me mention one other sort of announcement and then I'd like to just briefly describe the subject of the hearing. For some of you who got here very early today, you may have noticed that we had a video recorder set up and television set with a program on there.

The program that we were showing is one that was put out by one of the pharmaceutical companies, Hoffman-LaRoche, and it contains a quiz that you can go through called the "How To Live

Longer Test." It talks about nutrition, about exercise, about general lifestyle; and I think it's an interesting program.

It's one that we had to show before most people got here because we didn't have time built into our hearing to show it, but I hope that if any of you are interested in seeing it that you will stay right after the hearing. The hearing will end around 1 and then we'll show that again for anybody who's interested in staying to watch it.

We also want you to know that the program is available through our office or, of course, through that pharmaceutical company if there are particular senior centers or other groups throughout the State that would like to show it to their people. So let's go ahead with the subject of this hearing.

The hearing today focuses on the relationship between nutrition, aging, and health. We are now just beginning to understand this extremely important connection.

The treatment of illnesses associated with growing older has been improving. We know with certainty that exercise and fitness, the safe use of medicine, smoking cessation, injury control, and preventive health services lead to healthier lifestyles; but what we eat is perhaps the most significant factor in reducing the risk of disabling disease.

We learned at the earlier hearing, last year, that seniors are just as interested in maintaining their health as anybody else and they are never too old to pursue healthier habits. Good nutrition is directly related to our health and choosing the wrong foods may complicate the future well-being of any of us.

It is now known that overeating or eating nonnutritious foods can lead to overweight and obesity, and obesity can lead to an array of health problems: Diabetes, for one; high blood pressure, which of course can lead to heart disease and stroke.

It is now known that the nutritional needs of the elderly may be somewhat different from the nutritional needs of the rest of the population. A recent study of 10,000 people, aged 17 to 74, showed that a drop in the intake of calcium, potassium, vitamin A, and vitamin C was strongly present in cases of hypertension, an all-too-common affliction of the elderly.

It is generally recognized that an overabundance of salt in the diet can raise blood pressure. A diet low in saturated fats and high in vegetables and fiber, on the other hand, is recognized as a healthy diet to control one's weight.

A recent study involving seniors demonstrated that although they know generally what foods to avoid, they did not know what food to eat instead. It's my hope that all of us can learn more about what the right choices are.

Better nutrition is not up to individuals alone. It also depends on social and economic conditions, and on policymakers. We have an outstanding selection of nutrition experts and Government representatives here today to discuss nutrition and malnutrition issues among the elderly, and to help shed light on these various aspects of the subject.

To lead off the discussion we have Dr. Jeffrey Blumberg of Tufts University who is a nationally recognized expert in the field of

human nutrition and aging research. He will give us an overview of the national perspective.

Dr. Blumberg has studied the relationship between nutrition and aging, and is one of the most qualified individuals in the Nation to tell us what modern science now knows and what areas still need further study. I have also asked Dr. Blumberg to join me after his testimony to ask questions of our other witnesses as we try to reach definite conclusions and recommendations.

Our first panel is going to be composed of five senior citizens who have very graciously accepted our invitation to be with us today. These individuals, like many of you, have had firsthand experience in what good nutrition can do to help older Americans. I know that they will tell us what's on the minds of older New Mexicans on this subject.

The second panel will review the Government perspective; and here with us is the New Mexico director for the State Agency on Aging, Rita Maes; Sonia Crow of the Department of Agriculture; Dr. Evan Hadley of the National Institute on Aging; Wynona Town of the Indian Health Service; and I believe Valerie Conner is unable to be with us today from the Southwest New Mexico Area Agency on Aging, but her testimony is going to be included in the record.[1]

Our last panel has the most difficult job. I have asked them to look to the future and suggest some directions that we can take to improve the delivery of nutrition services to seniors.

Given these times of fiscal restraint, improved delivery and accountability must be encouraged. Dr. Bob Thompson, who is a professor at the University of New Mexico School of Medicine, will address the clinicians' point of view; Kathryn Treat of the New Mexico Extension Service will examine the broader participation of extension agents in assisting seniors; and Stephanie Fallcreek, who is the director of the Institute for Gerontological Research and Education at New Mexico State University, will look at changes in the title III–C congregate meal program and at the dissemination of accurate nutrition education material.

It has become increasingly clear to me that diet and nutrition are vital elements of a total health care delivery system. In 1985, the elderly will spend over 15 percent of their income on health care for an average of $1,660 per person.

The elderly are also the heaviest users of all services. According to the Special Committee on Aging, they account for 29 percent of all hospital discharges and one-third of the country's personal health care expenditures, although they constitute only about 11 percent of our population.

We, in the Congress, are looking toward prevention as a means of dealing with the rising costs of health care in the future; and I am personally committed to doing all I can to improve the health and productivity, and quality of life of New Mexicans and all Americans, particularly the elderly.

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[1] See appendix, p. 108.

I am extremely pleased with the excellent panel of witnesses who have agreed to be here today. Now I would ask if Dr. Blumberg would go ahead and take the witness chair over here.

Let me tell you a little bit more about Dr. Blumberg. Dr. Blumberg received his bachelor of science degree in pharmacy and psychology in 1969 from Washington State University, and his Ph.D. in pharmacology in 1974 from Vanderbilt University School of Medicine.

He received postdoctoral training in cycle nucleatide metabolism at the Tennessee Neural Psychiatric Institute and the University of Calvary. Dr. Blumberg is associate professor of the School of Nutrition at Tufts University. His research efforts in this area are nationally and internationally recognized, and we greatly appreciate his willingness to be here today and to put the whole subject of this hearing in some kind of national perspective for us.

Please go ahead with your testimony, Doctor.

STATEMENT OF JEFFREY BLUMBERG, Ph.D., ACTING ASSOCIATE DIRECTOR, HUMAN NUTRITION RESEARCH CENTER ON AGING, TUFTS UNIVERSITY, BOSTON, MA

Dr. BLUMBERG. Thank you for your generous introduction.

I'm delighted to be here to address issues about nutrition and aging, and I am particularly happy to share with you some of the viewpoints that I know are common among many of the nutrition scientists in this area now.

Nutritional problems associated with aging through midadult life and the years beyond 65 have come to national attention for several reasons. Nutritional status surveys of the elderly have shown a low to moderate prevalence of frank nutrient deficiencies and, more importantly, an increased risk of deficiencies in both institutionalized and in noninstitutionalized, free-living elderly.

These conclusions in these surveys have been based upon assessments of dietary energy and nutrient intakes, measurements of biochemical values relevant to specific nutrients, and on the recognition of clinical signs thought to be associated with nutrient deficiencies. In addition, nutritional status appears to influence the rates of decline in a variety of organ systems, declines which are recognized as important deleterious functional changes that are associated with the aging process.

So we are interested in finding out how nutrition may help retard the rate of this kind of organ function decline.

Nutrition can also be a factor in the progressive changes in body composition that are associated with aging, such as the loss of lean body mass or skeletal muscle, the loss of bone salts, and increases in adipose [fat], tissue. Evidence also demonstrates that nutrition is linked to many of the chronic diseases which afflict older adults and the elderly.

There is now an increased interest in the role of diet and nutrition as a vital component of the health care delivery system for the elderly. We are reaching a point, now, where the need to assist those requiring specific dietary management and to identify population groups which are vulnerable to nutrition deficiencies is becoming very important, and even critical.

While there is a recognition, as I mentioned, of the high-risk status of many elderly for nutrient deficiencies based on surveys, I would like to emphasize that nutrition surveys of the elderly have been of very limited scope. They have infrequently included individuals over the age of 75, and they have often used varying standards of comparison in presenting the frequencies of nutrient deficiencies. These kinds of limitations to the surveys make it difficult to come to as sound and conclusive evidence as we would like.

Currently, survey estimates of energy and nutrient intakes are subject to many errors, for example, nonstandardized methods, errors in estimating food consumption, errors in our food table analytical values from which nutrient values for specific foods are derived and errors in assumptions about the bioavailability of nutrients in the elderly—that is, do elderly really absorb and utilize nutrients in exactly the same way as younger individuals do?

Nutritional surveillance programs should, but very often do not, include measurements of nutrient levels in blood plasma and blood cells, and the use of nutrient supplements and medications has frequently been excluded from survey data, although these factors are known to significantly influence nutritional status.

The only truly complete nationwide nutritional survey data available is from the National Health and Nutrition Examination Survey I—oftentimes referred to as NHANES–I—and that data is now over 11 years old. Although the study has been repeated in a NHANES–II study, that data is not yet really available from the U.S. Center for Health Statistics despite the fact that planning is already underway for a third survey, the NHANES–III, although I should add that for the first time, now, this group will be examining elderly individuals over the age of 75.

The current U.S.-recommended dietary allowance, or the RDA's, provides guidelines for assessing the intake of energy and specified nutrients for adults up to age 50, and then for a category labeled "51 years and above." However, essentially all of the studies on nutrient requirements have been carried out in young adults and then the estimated allowances for older adults and the elderly are based on extrapolation.

That is, all of the RDA's that we currently have have really never been developed in the elderly. What the required nutrients are for the elderly are really just guesses based on what we know about young people to date. Studies that have actually taken elderly subjects and looked at them, and asked them what their requirements are have really never been done.

The current RDA for the elderly provides a downward adjustment in energy allowance with age, but protein and most micronutrients are not so adjusted and are maintained at middle-aged adult levels.

Though this situation has been imposed largely by a lack of adequate data, it does represent a lack of realism to assume that a 51-year-old and a 90-year-old have similar requirements. This period of the elderly is one of a dynamic change, a period in which nutrient and energy requirements between individuals and between identifiable population subgroups become greatly increased.

Contrary to popular myth, the elderly don't become more and more alike: they actually become more and more different as they

age. Among the factors contributing to this increased variability in food choices and in nutrient requirements in the elderly are social circumstances, including their isolation and differences in physical activity levels; differences in the severity and the rates of decline of body functions, particularly that of the gastrointestinal tract which has a significant role to play in how nutrition affects the body; the presence of chronic digestive diseases is different among the elderly and that is going to affect their requirements for different nutrients, and last, both drug- and alcohol-induced nutrient deficiencies play a role in determining the different requirements of the elderly.

As I indicated, nutritional status surveys have revealed that substantial numbers of the elderly are seriously lacking in particular nutrients. In some studies, over half of the respondents failed to meet the recommended level of calories for energy and two-thirds have less than adequate calcium intakes.

Many older individuals eat few fruits and vegetables, particularly the vitamin A and the vitamin C-rich varieties; and despite the widespread use of enriched breads and cereals, low intakes of the B complex vitamins are common among the aged. Despite the prevalence of nutrient supplementation among the elderly—and some studies have shown that as many as half of the elderly may be taking nutritional supplements—the use of these supplements often appears irrational and inappropriate to their true needs.

Decreasing energy intake, or the amount of calories you consume with advancing age, has important implications for dietary quality in terms of protein, vitamins, and minerals. Allowances for these nutrients assume levels of overall energy intake considerably exceeding a large portion of the levels actually observed.

Dietary quality becomes very difficult to assure when overall energy intake is low and requires a careful selection of proper food choices. Basically, what I'm saying is that the amount of energy or the total number of calories the elderly consume is declining and yet the amounts of vitamins and minerals that are recommended assume that the elderly are eating much larger amounts of food than they are.

So in order to maintain an adequate intake of many of these micronutrients, these vitamins and minerals, the elderly are going to have to be much more careful in selecting what we call nutrient-dense food: eating less junk food or empty calories.

Recent studies revealed that energy intake decreases even more rapidly in the very old due to the emergence of disability which limits physical activity. Surveys have frequently documented low biochemical indices for vitamins B_6, B_{12}, C, D, folic acid, thiamin, riboflavin, and the minerals calcium, iron, and magnesium.

However, it should be noted that, like the nutrient intake data which I told you is sort of "soft" data, the criterion for adequacy of nutritional biochemical values are based upon ranges accepted for younger adults. That is, just as we have extrapolated values of nutrient requirements for the elderly based upon what, in fact, are values for younger adults, the same is true for biochemical norms.

Yet we now know that the biochemical norms for the elderly may be different from those of younger groups, and we have evidence along those lines demonstrated with standard hematologic

tests, glucose tolerance tests, and plasma-albumin tests, all of which show that the standards, the biochemical indices for the elderly, are, in fact, different than for younger people.

Recent studies have indicated that requirements for some nutrients may be increased in the elderly. That is, despite the fact that we know, in many cases, their nutrient intake is low, just bringing them up to the current RDA levels, many believe, including myself, is still not adequate

For example, vitamin D is essentially for maintaining normal calcium and phosphorus metabolism, and bone health. Unfortified foods are, in general, a poor source of vitamin D; but the evidence that we have generated within the past couple of years suggests that the elderly are less able to absorb vitamin D through the gastrointestinal tract and they are less able to synthesize vitamin D in the skin following exposure to sunlight.

Furthermore, the elderly seem less able to convert dietary precursors into the active form of vitamin D in the kidney. Those dietary precursors must be activated by enzymes in the kidney to the metabolically active form of vitamin D.

So what I'm suggesting is that for some nutrients, such as vitamin D, the RDA's don't take into account physiological changes that occur in the elderly that increase their requirements.

Similar data has been generated for vitamin B_6, which is an important cofactor in many enzymatic reactions. Although vitamin B_6 is widely distributed in food, surveys have shown that as many as 50 to 90 percent of the elderly have low vitamin B_6 intakes.

When we combine the low dietary intake with the age-related changes in vitamin B_6 metabolism indicating that the elderly need higher levels, you can see where we are beginning to encounter some problems.

Vitamin C is involved in oxidation reactions and appears necessary for normal collagen synthesis. Vitamin C is commonly found in foods like broccoli and kale, cabbage, and citrus fruits. Yet low vitamin C intakes and diminished blood levels are very common among the elderly.

A recent study in elderly subjects noted that saturated blood levels of vitamin C were achieved only with average daily intakes substantially greater than that required in younger individuals. In order to maintain an optimal biochemical status to saturate the blood cells with vitamin C, elderly subjects had to take in much more than younger individuals.

There's also a marked prevalence of low dietary intakes of calcium among the elderly. Dairy products are consumed with decreasing frequency with age and vegetable sources do not contain calcium which is readily available for digestion. Moreover, it has been found that calcium absorption may decrease by as much as 50 percent with age.

We can talk about this later, but we certainly now know that there's extensive literature relating low-calcium intake to the loss of bone which accompanies aging.

There are also diet links to acute stress or acute reactions. The ability of the elderly to respond to acute stresses, such as changes in altitude, heat, trauma, surgery, and infection, can be influenced by nutritional status. Stress or trauma can convert the marginal

nutritional status of the elderly patient into an acute deficiency with serious consequences.

For example, acute infectious disease in the elderly can precipitate encephalopathy and confusional states in those with low thiamin status and neurologic abnormalities in those with low niacin status. So what I am saying is even though there may be no apparent ill effects to having a marginal nutritional status or subclinical deficiency, that any kind of acute stress can produce serious deficiencies in the elderly.

Poor nutritional status has also been found to compromise a patient's recovery and may result in secondary complications, poor wound-healing, impaired immunity, anemia, muscle and organ degeneration, prolonged hospitalization or even death.

In addition to the effects of marginal nutritional status has on these kinds of acute stresses and trauma that the elderly may undergo, we are learning more and more now about the linkage between diet and chronic disease. It has been suggested that nutrition is the single most important component of preventative health care.

Diet has been associated with cancer, heart disease, diabetes, stroke and hypertension, dental disease, arteriosclerosis, and cirrhosis of the liver. Studies are now underway examining dietary therapy with nutrient precursors of neurotransmitters, like choline and tryptophan, to alleviate declining brain function. Preliminary work now indicates a role for diet in retarding the onset of cataracts.

So with more research, we are learning that nutrition may be playing a vital role in these chronic degenerative conditions that are associated with aging, and that diet may be able to retard the onset or perhaps even prevent some of these conditions, thus enhancing the quality of life of the elderly individual.

While lifelong dietary habits have been linked to specific diseases, little, however, is actually known about the effectiveness of specific dietary management for the prevention of a number of chronic diseases in the elderly. Nonetheless, as an example, identification of major dietary risk factors, including cholesterol and saturated fat, and our new understanding of the controlling factors of plasma lipoprotein levels has brought closer the control of atherosclerotic vascular disease, the most common cause of morbidity and mortality among the elderly.

The association between hypertension and obesity has long been recognized. More recently, high sodium and high protein, and low calcium and low potassium intakes have been correlated with hypertension.

So we are learning more and more about dietary markers for diseases such as high blood pressure.

Dietary guidelines have been proposed to reduce the incidence and the severity of adult-onset diabetes, including the reduced intake of total and saturated fat calories and simple sugars, and the increased consumption of complex carbohydrates and fiber. There is now considerable evidence from epidemiological studies and from research on experimental animals that a substantial proportion of human cancer may be attributable to the role of calories and obesity, to the role of specific nutrients—especially the dietary

antioxidants like vitamins A, C, E, selenium and beta-carotene—or to non-nutrient dietary factors like fiber.

Foods containing calcium, vitamin D, phosphate and fluoride have been found to play a key role in the genesis of osteoporosis although the effectiveness of dietary intervention after the disease is present is not established yet.

Considering the long latency period of diseases like atherosclerosis and cancer, it would appear that whatever dietary preventative steps are proven effective must be incorporated into lifelong eating habits. The role of diet in the etiology, the treatment and prevention of involutional organ system changes—such as declines in the capacity of the immune system or declines in kidney function—is a new research area not yet enough advanced to provide a basis for specific dietary recommendations, but nonetheless optimistic enough to indicate that diet, may play a partial role in reversing some of those conditions.

No totally satisfactory treatment is currently available for the prevention or treatment of most of these age-related diseases; however, we are now at a stage where new insights into cellular mechanisms regulating these biological processes may lead to an increased understanding of why individuals develop these conditions and how nutrients affect them.

Such basic research combined with prospective long-term clinical trials are the only realistic approaches available to begin to formulate a rational recommendation and policy with regard to diet and health promotion.

Nutritional requirements are influenced by numerous interacting factors, such as genetics, alcohol, smoking, physical activity, and medications. I don't mean to imply by any of my previous statements that nutrition is the only key factor. Certainly these other ones also play a role in the development of these age-related conditions.

With regard to medications, it should be noted that the elderly are the greatest consumers of both prescription and over-the-counter drugs. While it has been largely overlooked by health care practitioners, the literature is now replete with examples of drug-induced nutrient deficiencies.

It has even been suggested that drug-induced malnutrition in the elderly is commonly due to their excessive use of over-the-counter drugs, such as antacids, laxatives, and non-narcotic analgesics. Drugs may interfere with appetite and they may alter the absorption and the distribution and the utilization of nutrients.

Considering the common practice of chronic, multiple-drug treatment among the elderly and the prevalence of marginal nutrient intakes in this group, their high-risk status for drug-induced nutrient deficiencies is not surprising. Research has also revealed that the converse is true: that diet and nutritional status may affect both drug efficacy and safety.

Adverse drug-nutrient interactions can often be avoided by appropriate diet, by nutrient supplements, or by a temporal separation if health care providers are alerted to the problem and then intervene accordingly.

I would like to make just a few comments about the nutritional care of elderly patients in contrast to some of these comments

about healthier free-living elderly. The development of nutritional programs for the elderly is a perplexing task due to the lack of established dietary, anthropometric—or physical—measurements and biochemical standards for the aged.

Moreover, the use of clinical signs to diagnose malnutrition is a difficult task in the elderly as several of the body changes associated with aging—such as flaking skin, sparse hair, or fissures of the tongue—mimic specific symptoms of nutrient deficiency. The achievement of a desired food intake is also complicated in the elderly because their physical, social, and emotional needs which may interfere with their appetite or limit their ability to prepare or consume nourishing meals.

Several key points need to be kept in mind when considering the nutritional care of this heterogeneous group we call elderly patients. Each elderly patient is, in fact, a person with highly individualized abilities and capabilities, and widely varying levels of functioning. Therefore, a personal assessment is essential.

Elderly patients are more likely than younger patients to be at nutritional risk and may be in a state of marginal nutrition deficiency upon entering into the health care system. A marginally nourished patient can become frankly deficient under the stress of a new physical problem or an emotional upset.

Elderly patients require a clinician's careful attention to nutritional status at the onset and then a well-worked-out care plan followed by a monitoring of progress. A personalized nutritional assessment should include a dietary history, a description of activity patterns, and anthropometric and biochemical measurements.

The simplest and often-neglected measurements are admission body weight and monitoring of nutritional status by weight determination at regular intervals. A major change in a patient's weight should always be investigated, the cause determined, and appropriate action taken.

Clearly there is still much that needs to be learned about how to assess the nutritional status of the older individual and the elderly population. While marginal nutrient intakes, increased risk of deficiencies, and low nutritional biochemical indices are common among the elderly, it is now necessary to clarify when these factors are associated with functional changes.

Dietary, anthropometric, and biochemical standards must be established and, ideally, correlated with a measure of function. We do not have those standards for the elderly now.

Research programs have been established, particularly by the U.S. Department of Agriculture's Human Nutrition Research Center on Aging at Tufts University and by the National Institutes of Aging, which are examining three basic questions: How does nutrition influence the progressive loss of tissue function with aging? What is the role of nutrition in the genesis of the chronic degenerative diseases associated with aging? And, finally, what are the nutrient requirements of people who are already old, now?

Thank you.

Senator BINGAMAN. Thank you very much, Doctor.

[The prepared statement of Dr. Blumberg follows:]

PREPARED STATEMENT OF JEFFREY B. BLUMBERG, PH.D.

Risks of Malnutrition in the Elderly.—Nutritional problems associated with aging throughout mid-adult life and the years beyond 65 have come to national attention for several reasons. Nutritional status surveys of the elderly have shown a low to moderate prevalence of frank nutrient deficiencies or of an increased risk of deficiencies in both institutionalized and non-institutionalized groups. These conclusions are based upon assessments of dietary energy and nutrient intakes, measurements of biochemical values relevant to specific nutrients and on recognition of clinical signs thought to be associated with nutrient deficiencies. Nutritional status appears to influence the rates of decline in a wide variety of organ systems, declines which are recognized as important, deleterious functional changes associated with the aging process. Nutrition also may be a factor in the progressive changes in body composition associated with aging such as the loss of lean body mass and bone and the increase in adipose tissue. Evidence demonstrates that nutrition is linked to many of the chronic diseases which afflict older adults and the elderly. There is now increased interest in the role of diet and nutrition as a vital component of the health care delivery system for the elderly. The need to assist those requiring specific dietary management and to identify population groups which are vulnerable to nutritional deficiencies is becoming critical.

Nutritional Surveys in the Elderly.—Despite the recognized risks of malnutrition in the elderly, nutrition surveys of this population have been of very limited scope, have infrequently included individuals over the age of 75 years, and have used varying standards of comparison in presenting the frequencies of nutrient deficiencies. Currently, survey estimates of energy and nutrient intake are subject to many errors, e.g. nonstandardized methods, errors in estimate of consumption, errors in food table analytical values, and errors in assumptions about bioavailability of nutrients. Nutritional surveillance should, but often does not, include measurements of nutrient levels in blood plasma and blood cells. The use of nutrient supplements and medications have frequently been excluded from surveys although these factors significantly affect nutritional status. The only complete nationwide nutritional survey data (National Health and Nutrition Examination Survey I) is over 11 years old and information gathered from NHANES II has hardly been analyzed by the U.S. Center for Health Statistics; planning for NHANES III is underway and includes a 75+ year old group.

RDA's for the Elderly.—The current U.S. Recommended Dietary Allowance [RDA] provides guidelines for assessing the intake of energy and specified nutrients for adults up to age 50 and for the category "51 years and above". However, essentially all of the studies on nutrient requirements have been carried out on young adults and the estimated allowances for older adults and the elderly are largely based on extrapolation. The current RDA provides for a downward adjustment in energy allowance with age but protein and most micronutrients are not so adjusted and are maintained at middle-aged adult levels. Though this situation has been imposed by inadequate data, it represents a lack of realism to assume that a 51 year old and 90 year old have similar requirements. This is a period of dynamic change, a period in which nutrient and energy requirements between individuals and between identifiable population subgroups become greatly increased. Among the factors contributing to this increased variability in food choices and in nutrient absorption, metabolism and utilization are: (a) social circumstances, including isolation and physical activity levels; (b) differences in severity and rates of decline of body functions, particularly of the gastrointestinal tract; (c) presence of chronic, degenerative diseases; and (d) drug- and alcohol-induced nutrient deficiencies.

Nutritional surveys have revealed that substantial numbers of the elderly are seriously lacking in particular nutrients. In some studies over half the respondents failed to meet the recommended level of calories and two thirds have less than adequate calcium intakes. Many older individuals eat few fruits and vegetables, particularly vitamin A- and vitamin C-rich varieties. Despite the widespread use of enriched breads and cereals, low intakes of the B complex vitamins are common in the aged. Despite the prevalence of nutrient supplementation among the elderly, the use of such supplements often appears irrational and inappropriate.

Decreasing energy intake with advancing age has important implications for dietary quality in terms of protein, vitamins and minerals. Allowances for these nutrients assume levels actually observed. Dietary quality becomes very difficult to assure when overall energy intake is low and requires a careful selection of proper food choices. Recent studies reveal that energy intake decreases even more rapidly in the very old due to the emergence of disabilities which limit physical activity.

Surveys have frequently documented low biochemical indices for vitamins B_6, B_{12}, C, D, folic acid, thiamin, riboflavin and the minerals calcium, iron and magnesium. However, it should be noted that, like nutrient intake data, the criteria for adequacy of nutritional biochemistry values are based upon ranges accepted for younger adults; that biochemical norms for the elderly may be different from those of younger groups has been demonstrated with standard hematologic, glucose tolerance and plasma albumin tests.

Altered Micronutrient Requirements in the Elderly.—Recent studies have indicated that requirements for some nutrients may be increased in the elderly. Vitamin D is essential for maintaining normal calcium and phosphorus metabolism and bone health. Unfortified food is, in general, a poor vitamin D source; deep sea fish have a high vitamin D content but meat, eggs and vegetables contain little of the vitamin. Limited evidence suggests that the elderly are less able to absorb dietary vitamin D through the gastrointestinal tract and to synthesize vitamin D in the skin following exposure to sunlight. Furthermore, the elderly seem less able to convert dietary precursors to the active form of vitamin D in the kidney.

Vitamin B_6 is an important cofactor in many enzymatic reactions. Vitamin B_6 is widely distributed in food especially in meat, poultry, fish, rice, beans and nuts. Nonetheless, surveys have shown that 50–90 percent of elderly have low vitamin B_6 intakes. There is now also evidence to suggest that changes in vitamin B_6 metabolism with age result in a higher requirement of the vitamin to maintain optimum functional levels.

Vitamin C is involved in oxidation reactions and appears necessary for normal collagen synthesis. Vitamin C is commonly found in foods like broccoli, kale, cabbage and citrus fruits. Low vitamin C intakes and diminished blood levels are common among the elderly. A recent study in elderly subjects noted that saturated blood levels of vitamin C were achieved only with an average daily intake substantially greater than that required in younger people.

There is a marked prevalence of low dietary intakes of calcium among the elderly. Dairy products are consumed with decreasing frequency with age and vegetable sources do not contain calcium which is readily available for digestion. Moreover, it has been found that calcium absorption decreases as much as 50 percent with age. There is now an extensive literature relating low calcium intake to the loss of bone which accompanies aging.

Diet Links to Acute Stress.—The ability of the elderly to respond to acute stressess such as altitude, heat, trauma, surgery and infection can be influenced by nutritional status. Stress or trauma can convert the marginal nutritional status of an elderly patient into an acute deficiency with serious consequences. For example, acute infectious disease in the elderly can precipitate encephalopathy and confusional states in those with low thiamin status and neurologic abnormalities in those with low niacin status. Poor nutritional status has also been found to compromise a patient's recovery and may result in secondary complications, poor wound healing, impaired immunity, anemia, muscle and organ degeneration, prolonged hospitalization, or even death.

Diet Links to Chronic Disease.—It has been suggested that nutrition is the single most important component of preventative health care. Diet has been associated with cancer, heart disease, diabetes, stroke and hypertension, dental disease, arteriosclerosis and cirrhosis of the liver. Studies are underway examining dietary therapy with nutrient precursors of neurotransmitters like choline and tryptophan to alleviate declining brain function. Preliminary work indicates a role for diet in retarding the onset of cataracts.

While lifelong dietary habits have been linked to specific diseases, little is known about the actual effectiveness of specific dietary management for prevention of a number of chronic diseases in the elderly. Nonetheless, identification of major dietary risk factors including cholesterol and saturated fat and our new understanding of the controlling factors of plasma lipoprotein levels has brought closer the control of atherosclerotic vascular disease, the most common cause of morbidity and mortality. The association between hypertension and obesity has long been recognized; more recently, high sodium and protein and low calcium and potasium intakes have been correlated with hypertension. Dietary guidelines have been proposed to reduce the incidence and severity of adult onset diabetes including reduced intake of total and saturated fat calories and simple sugars and increased consumption of complex carbohydrates and fiber. There is now considerable evidence from epidemiological studies and from research on experimental animals that a substantial proportion of human cancer may be attributable to the role of calories/obesity, to specific nutrients, especially the dietary antioxidants (vitamins A, C, E and selenium), or to nonnutrient dietary factors like fiber. Foods containing calcium, vitamin D, phosphate,

and fluoride have been found to play a key role in the genesis of osteoporosis although the effectiveness of dietary intervention after the disease is present is not established.

Considering the very long latency period of diseases like atherosclerosis and cancer, it would appear that whatever dietary preventative steps are proven effective must be incorporated into lifelong eating habits. The role of diet in the etiology, treatment and prevention of involutional organ system changes such as declines in the capacity of the immune system and kidney function is a relatively new research area not yet enough advanced to provide a basis for specific dietary recommendations. No totally satisfactory treatment is currently available for prevention or treatment of these age-related diseases. We are now at a stage where new insights into the cellular mechanisms regulating these biological processes may lead to increased understanding of why individuals develop these conditions and how nutrients affect them. Such basic research combined with prospective, long-term clinical trials are the only realistic approaches available to begin to formulate rational recommendations and policy with regard to diet and health promotion.

Drug-Nutrient Interactions.—Nutritional requirements may be influenced by numerous interacting factors such as genetics, alcohol, smoking, physical activity and medications. With regard to this last factor, it should be noted that the elderly are the greatest consumers of both prescription and over-the-counter drugs. While largely overlooked, the literature is replete with examples of drug-induced nutrient deficiencies. It has been suggested that drug-induced malnutrition in the elderly is commonly due to their excessive use of over-the-counter drugs such as antacids, laxatives and non-narcotic analgesics. Drugs may interfere with appetite and alter the absorption, distribution, metabolism and/or elimination of nutrients. Considering the common practice of chronic, multiple drug treatment among the elderly and the prevalence of marginal nutrient intakes in this group, their high risk status for drug-induced nutrient deficiencies is not surprising. Research has also revealed that diet and nutritional status may affect drug efficacy and safety. Adverse drug-nutrient interactions can often be avoided by appropriate diet, nutrient supplements or temporal separation if health care providers are alerted to the problem and intervene accordingly.

Nutritional Care of the Elderly Patient.—The development of nutritional programs for the elderly is a perplexing task due to the lack of established dietary, anthropometric and biochemical standards for the aged. Moreover, the use of clinical signs to diagnose malnutrition is difficult in the elderly as several of the body changes which accompany aging, e.g. flaking skin, sparse hair and tongue fissures, mimic specific symptoms of nutrient deficiency. The achievement of a desired food intake is also complicated in the elderly because their physical, social and emotional needs may interfere with their appetite or limit their ability to prepare or consume nourishing meals.

Several key points need to be kept in mind when considering the nutritional care of this heterogenous group called elderly patients. Each elderly patient is a person with highly individualized abilities and capabilities and widely varying levels of functioning; therefore, a personal assessment is essential. Elderly patients are more likely than younger patients to be at nutritional risk and may be in a state of marginal nutritional deficiency upon entry into the health care system. A marginally nourished patient can become frankly deficient under the stress of a new physical problem or an emotional upset. Elderly patients require the clinicians careful attention to nutritional status at the onset and a well worked out care plan followed by a monitoring of progress.

A personalized nutritional assessment should include a dietary history, description of activity patterns and anthropometric and biochemical measurements. The simplest, and often neglected, measurements are admission body weight and monitoring of nutritional status by weight determination at regular intervals; a major change in a patient's weight should always be investigated, the cause determined and appropriate action taken.

New Research Programs.—There is much that needs to be learned about how to assess the nutritional status of the older individual and the elderly population. While marginal nutrient intake, increased risk of deficiency and low nutritional biochemistry indices are common among the elderly, it is now necessary to clarify when these factors are associated with functional changes. Dietary, anthropometric and biochemical standards must be established and, ideally, correlated with a measure of function. Research programs have now been established, particularly by the USDA Human Nutrition Research Center on Aging at Tufts University and the National Institute of Aging to examine three basic questions: (1) How does nutrition influence the progressive loss of tissue function with aging? (2) What is the role of

nutrition in the genesis of the chronic, degenerative diseases associated with aging? (3) What are the nutrient requirements of people who are already old?

Senator BINGAMAN. Let me ask a couple of questions and then we'll go on to our first panel. You talked about drug-induced nutrient deficiency among the elderly.

Could you, in lay terms, describe for us the nature of this problem as individual elderly citizens face it? Is this a cause of major health difficulties among the elderly?

Dr. BLUMBERG. It is difficult to answer because we really don't have the data. I would feel confident in stating that while it may not be the cause of major physical problems, I would suspect that it is the cause of many more minor ones.

Many of the side effects that you see from these kinds of drug-induced nutritional deficiencies result in symptoms like lethargy, malaise, anorexia [lack of appetite], weakness; unfortunately, I am afraid many clinicians may respond by saying, "Well, what do you expect? You are growing old"; when, in fact, if they should be alert to the fact that drugs may be inducing these kinds of reversible effects through a nutritional mechanism. Many of these side effects like weakness and headaches may, in fact, have a nutritional basis and can be easily treated—or easily avoided if they're recognized.

Senator BINGAMAN. Essentially what you're describing, as I understand it, is that the taking of over-the-counter drugs is, in many cases among the elderly, interfering with a proper appetite and the proper intake of food, and that is causing these side effects that you just described.

Is that what you are saying?

Dr. BLUMBERG. Absolutely. I will give you a simple example.

Many elderly use antacids, and not always for rational reasons. They are oftentimes inappropriately self-prescribed.

Many antacids contain aluminum or magnesium hydroxide. That causes a chemical reaction with phosphate in the diet so it forms an insoluble aluminum-phosphate or magnesium-phosphate salt in the gut which, then, is excreted and the phosphate cannot be absorbed.

If a person is on a marginal phosphate diet, this can precipitate signs of muscle weakness and tingling in the skin and a loss of appetite; and if the clinician is not alert to that fact, he may miss the cause for it and misdiagnose the problem or, more unfortunately, pass it off to old age.

Senator BINGAMAN. Let me ask on one other subject. You talked about the lack of adequate data from surveys on diets and what the elderly—and really what the entire population—is doing in the way of dietary habits.

As you may know—I think you do know because one of my staff people has helped give you this information—we have a bill pending in the Congress to try to put greater emphasis and a better structure on the monitoring of nutritional behavior in the country.

In your view, is that a priority if we are going to come up with some reasonably intelligent solutions to some of these nutritional problems?

Dr. BLUMBERG. I think it is a high priority. I think it is important to realize that nutritional status evaluations and assessments really serve two purposes.

One is to gather data to evaluate the current status of the population just to see whether, in fact, it is true that the elderly are at risk for malnutrition and, if so, for which nutrients. It is difficult to do that when the data is as much as a decade old, to try to figure out what the case is now, particularly in light of changing dietary practices and a growth of the elderly population.

But, equally important, it has to be recognized that these assessments also serve as research tools which we use to define what normal is, what baseline data are, and we use the data to develop hypotheses about the relationship between diet and health and disease. We use this information to begin to correlate food intakes with blood levels and with functional performance.

So these surveys are more than just finding out what elderly are eating. They really form the basis for new hypotheses and research programs designed to enhance the quality of life for elderly citizens.

Senator BINGAMAN. OK. Thank you very much.

Doctor, please come over here and be seated and help me ask questions of our next panel. If our first panel could come up and take their chairs here.

Our first panelists are: Gertrude Reynolds, Reynalda Lopez, Preston Keevama, Susie Candelaria, and Simon Lopez.

Why don't you people just take chairs there and let me introduce people a little more.

I am pleased to introduce this next panel, which is intended to give us an individual perspective on the relationship between nutrition, aging and health. We have five members of the panel.

Our first witness on the panel, at least in the order that I have them written down here—and we will just take them in that order—is Gertrude Reynolds who lives here in Albuquerque. She participates in senior programs through the Office of Senior Affairs here in Albuquerque.

We appreciate you being here, and we are looking forward to hearing your testimony.

Let me just say to all of you, whatever you may have written out in the way of testimony we will be glad to include in the record. If you would like to read that, that is fine. If you would like to just summarize, that is fine, too, whichever you prefer.

STATEMENT OF GERTRUDE REYNOLDS, ALBUQUERQUE, NM, A PARTICIPANT OF SENIOR PROGRAMS THROUGH THE OFFICE OF AGING

Ms. REYNOLDS. First, what does nutrition mean? I looked up the word in the dictionary. Nutrition is the act of or process of nourishing or being nourished. Then I wanted to combine it with the word nurture, which I also looked up in the dictionary: education, training, that which nourishes.

I want to combine these two words. Nourishing your body comes in many forms, such as food, love, people you have around you, activities, stimulations you give your body when you are nurturing it in a healthy way. That means exercise.

That means your body is getting all of the elements that it needs. Proper nutrition cannot be gained by just eating the proper food. A

very important aspect of reaching the maximum in good health is in making the decision, as an older person, to take responsibility for your own well-being.

This would mean each of us seeking correct information and learning more about our body functions, particularly the digestive system. The key to proper nutrition means learning to observe ourselves; to listen to our bodies' signals that no one can tell about but you.

The key is finding out what works best for you: what we need to avoid and what we need to change in the way of diet.

There is no set formula for proper or correct eating. Each person has his or her own particular needs. It is a very individual thing.

This is where learning to make observations about ourselves comes in. For example, eggs have many nutrients, but some people cannot tolerate them. We are like a machine: to run smoothly, we need the right foods.

There are some signs of trouble most of us are familiar with that can be directly traced to our diet. Some that come to mind are gas, headaches, urinating too frequently, mucous in the throat which, maybe, a change of diet may correct: there is something, maybe, we could do about it ourselves.

Older people, particularly, need to be aware of the attitude of resignation: giving up. "Oh, my body is old. Nothing works properly." Nothing we can do about it. In fact, we can pick this attitude up sometimes from professional people in the health field.

Your body gets messages from your mind. The reality is: yes, an older body is not working as well as it did 50 years ago. We need to realize our bodies are always changing, as everything is constantly changing.

Older people may say, "I used to be able to eat this and I would be fine. I have eaten this all of my life." The best guide in eating foods is how does your body react to that food? Listen to your body now. Don't get fixed. Be on top of the changes basic for us. Whole, not processed foods, and our attitudes are both very important.

At the turn of the century, the process of refining foods started. We are seeing the results of this now. It is very important to get the most whole food possible. This means whole grains, no preservatives added; the freshest vegetables and fruits that we can find and afford. Eating foods that are in season in our environment is a good way.

How do we go about getting correct information and support in this nutritional nurturing process? We need to be seeking information from as many sources as possible in the health field, including the growing field of the healing arts.

In seeking information and help, look at the person that you are seeking information from. Is she or he a healthy looking person? That's a good sign.

Make the decision to take the responsibility for your own well-being. This is a sum up. This could mean getting more information about how the digestive system works. This could mean learning to observe your own body functions and reactions.

This could mean keeping a positive attitude, not giving up on any part of your body. This could mean knowing the love you give yourself makes a difference in the way your body functions. This

could mean continuing to look for correct information from more than one source.

I put down a few of the sources. I think magazines are full of articles of health now, I have gotten quite a bit of information: magazines that you get at home or in the library. Don't exclude working with nutritionists and others in the healing arts field; and find the most fresh and wholesome food that you can.

[The prepared statement of Ms. Reynolds follows:]

PREPARED STATEMENT OF GERTRUDE REYNOLDS

What does Nutrition mean? I looked the word up in the dictionary.

Nutrition the act or process of nourishing or being nourished.

Nurture—Education, training, that which nourished.

I want to combine these two words. Nurturing your body comes in many forms such as food, love, people you have around you, activities, stimulation you give your body when you are nurturing it in a healthy way. That means that your body is getting *all* of the elements that it needs. Proper nutrition cannot be gained in just eating the proper foods.

A very important aspect of reaching the maximum in good health is in making the decision to take responsibility for your own well-being. This would mean each of us seeking correct information and learning more about how our bodies function particularly the digestive system. The *key* to proper nutrition means learning to observe ourselves, to listen to our bodies signals that *no one* can tell about but you. The *key* is finding out what works best for us, what we need to avoid or change.

There is no set formula for proper or correct eating. Every person has his or her own particular needs, it's an individual thing. This is where *learning* to make observations about ourselves comes in. For example, eggs have many nutrients, but some people cannot tolerate them. We are like a machine, to run smoothly we need the right foods.

There are some signs of trouble most of us are familiar with that can be directly traced to our diet. Some that come to mind are gas, headaches, urinating too frequently, mucous in the throat which a change in diet may correct. Older people particularly need to be aware of the attitude of resignation—giving up old body, nothing working properly, nothing we can do about it. In fact, we can pick this attitude up from professional people in the health field. *Your body gets messages from your mind.* The reality is, yes an older body is not working as well as it did 50 years ago. We need to realize our bodies are always changing—as everything else in constantly changing. Older people may say, "I used to able to eat this and I would be fine. I've eaten this always". The best guide in eating foods is *how does your body react to that food.* Listen to your body *now.* Listen to your body *now,* don't get fixed, be on top of changes basic for us. Whole not processed foods and our attitude toward ourselves.

At the turn of the century the process of refining foods started. We are seeing the results of this mess. It is very important to get the most whole food possible. This means whole grains—no preservatives added. The freshest vegetables and fruits we can find and afford. Eating foods that are in season in our environment is a good way.

How do we go about getting *correct* information and support in this nutritional and nurturing process. We need to be seeking information from as many sources as possible in the health field, including the growing field of the healing arts. In seeking information and help, look at the person that you are seeking information from. Is she or he a healthy looking person? This is a good sign.

To sum up: Make the decision to take responsibility for your own well-being. This could mean getting more information about how the digestive system works. This could mean learning to observe your own body functions and reactions. This could mean keeping a positive attitude; not giving up on any part of your body. This could mean knowing that the love you give yourself makes a difference in the way your body functions. This could mean continuing to look for correct information from more than one source.

Reading—Magazine—Library. Include working with nutritionist and others in the healing arts field.

Finding the most whole fresh foods possible.

Senator BINGAMAN. Thank you very much. We appreciate that.

Before we ask any questions of the panel, why don't we go through and have each of the panel members testify. Our next witness is Reynalda Lopez. Ms. Lopez is also from Albuquerque. She is a former mealsite manager for the Congregate Meal Program, and is 73½ years old. She participates in the senior program through the Office of Senior Affairs.

We appreciate you being here very much.

STATEMENT OF REYNALDA LOPEZ, ALBUQUERQUE, NM, A PARTICIPANT OF PROGRAMS FOR SENIORS THROUGH THE OFFICE OF SENIOR AFFAIRS IN ALBUQUERQUE

Ms. LOPEZ. Senator Bingaman, older members that are with us, my theme today is old age. Mr. Bingaman told you how old I am. I did not want it known. [Laughter.]

Senator BINGAMAN. Well, it is right here in your testimony.

Ms. LOPEZ. Neglect of the elderly person means you are depriving that person, her or him, of food, heat, appropriate clothing, sanitary care, bathing, a clean place to live, medical and nursing care, and companionship.

Now, I'm very much on companionship. I believe that these programs that the nutritionist gives us takes care of lot of our—I know it does mine—necessity for companionship. Most of my children don't live around me anymore; a lot of my friends have gone, so I would stress companionship.

Of all the meals I managed for 2 years in the nutrition program, I know that without that one meal a day many older people would go hungry. I am not talking about people that drive and self-cook. I am talking about people that no longer drive or cannot cook, maybe cannot even bathe themselves any longer.

Without that one meal a day and the companionship that goes with it, they would go hungry. We old people like to talk—and I am one of the best talkers there ever was.

Our sons and daughters are so busy trying to make a living they have no time to listen to us. Some people have no TV or telephone, or if they do they don't know how to use them. Some people never learned to read or write.

This is the truth: I remember going to visit my father-in-law after his wife had passed away. I looked in the refrigerator and found it bare of food. The only thing that was in there were some sweet rolls.

So I asked him, "What are you eating?" "Coffee and rolls," he said. So I went to the store and brought back some canned soup and I thought, "Well, all he has to do is heat it."

I went back the next Sunday and the cans of soup were sitting there unopened. I said, "Mr. Meek, you haven't opened the soup." He said, "I don't know how." There was a man that, when I became his daughter-in-law, was very proud, very active.

I said, "Who brings you the rolls?" He said, "The neighbors." I said, "Why don't you ask the neighbors to open the soup for you?" He said, "I didn't want them to know that I couldn't open a can of soup."

So his pride almost starved him to death. I took him home with me, that's the story of it, to take care of him.

I'm very thankful for our Government, for all they do and try to do; but the redtape, oh, boy. [Laughter.]

When old people are shoved from one agency to another, they get discouraged and they stop asking for help.

Am I wrong, people?

[Chorus of no's.]

Ms. LOPEZ. I'm right. So we want you to fix that. [Laughter.]

Now, about food stamps. I have been refused because my checking account balance is too high. I still have a mortgage on my house. I pay $174 on it, then the gas, the lights and the water comes to $100, sometimes more. I pay $30 for supplement insurance for what the Government won't pay for me. I have to pay $30 a month on it.

That, gentlemen, leaves me with $140 for food. To supplement my income, I sell at the flea market. I am just one of the millions of older people that are trying to supplement their income by doing something.

Some of them crochet and sell their crochets; some of them even make chili and sell chili; and so on, so forth. But I am 73 years old, and how much longer can I supplement my income by selling at the flea market?

I thank you very much. [Applause.]

Senator BINGAMAN. Thank you very much.

Our third witness on this panel is Preston Keevama who lives in San Juan Pueblo outside Espanola. He has been very active in the Title VI Indian Grantee Program.

He recently was elected Chairman of the Indian Council on Aging, a Council whose of membership is composed of all the Title VI grantees: Title VI, of course, of the Older American Act.

Thank you very much for being here. We look forward to your testimony.

STATEMENT OF PRESTON KEEVAMA, SAN JUAN PUEBLO, NM, CHAIRMAN, INDIAN COUNCIL ON AGING

Mr. KEEVAMA. Senator Jeff Bingaman, distinguished guests, you young people out there, and those special people: the elders.

My name is Preston Keevama. I am chairman of the New Mexico Indian Council on Aging which represents approximately 8,000 Indian elderly of the 19 pueblos of New Mexico and two Apache Tribes: Taos, Picuris, San Juan, Santa Clara, San Ildefonso, Pojoaque, Nambe, Tesuque, Jemez, San Felipe, Santo Domingo, Isleta, Cochiti, Sandia, Santa Ana, Zia, Zuni, Laguna, Acoma, Jicarilla, and Mescalero.

I feel privileged to have the opportunity to present this testimony, which is supported by tribal governments throughout the State, and on behalf of the New Mexico Indian Council on Aging, which makes up a very unique and distinct population: those 55 and over.

What makes us elderly Indians a unique population? Let me go back to the time when we were self-sufficient. We raised our own crops, weaved our own cloth, and made our own traditional attires, and built our own homes.

Down through the centuries, our fathers and their fathers have lived on this land. It is a creation of the grassroots which prompts me to be here today.

Because of our pride of being Indians, we have preserved our self-identity. This we have done through the continued cultural feast activities which requires preperation to strengthen our spiritual well being, and which is expressed through our dancing and other religious ceremonies.

Because of the societal changes, lifestyles have changed for us also. We are living in two worlds.

Our Indian people willingly joined the Armed Forces to defend our country during World War II, which was a turning point, and upon our return to our reservations we brought with us new ways of living. Lifestyles began to change: industrial and technological changes, which have had a significant impact on our nutrition, physical, and mental health.

No longer were we grinding our own corn and raising our own livestock and crops. We were exposed to other conveniences; fast foods overpowered our corn meal and posole; diets changed.

Also, there was no longer a need to work out in the fields and cultivate our land. Substantial paying jobs were obtained in neighboring communities and urban settings. These lifestyles have created obesity and other physical and mental health problems.

Today, we still experience our pride of being Indians. We continue our festival ceremonies, eat our traditional food, but the changes of lifestyle throughout the years have created concerns we wish to address today.

Values and work ethnics are unique among us, the Indian population. However, because of other cultural exposures we find a need to strengthen these values and instill them in our young- and middle-aged adults in order to preserve our heritage.

Statistics indicate life expectancy for Indians is low in comparison to other ethnic groups; there are approximately 8,000 elderly Indians in New Mexico facing numerous problems in the areas of nutrition, physical, and mental health.

Our senior citizen programs are providing our elders with one nutritional meal four or five times a week. This is not sufficient. We are in dire need of a more comprehensive array of services for our elderly to include not only one prepared meal per day, but to motivate and instill in each and every elderly the desire to change his or her nutritional intake and change the methods of food preparation in order to insure a healthier and stronger individual.

These services should include provision for social activities and personal growth, including physical fitness programs. We are in dire need of additional physical facilities to include recreational and other social activities as well as trained staff to work closer with our elderly.

Nutritional education is a vehicle to create attitude changes and eating habits, which in turn will reduce obesity, dependency on alcohol and drugs. This will greatly decrease heart conditions, cancer, diabetes, hypertension, and other fatal diseases.

Because many of us live on isolated reservations, transportation to health facilities and providers is extremely difficult and creates hardships for the families. If more programs would be available to

provide in-home care services, this definitely would eliminate the institutionalizing of our elderly.

These services need to include the necessary nutrition, health care for the elderly, and other supportive services. By addressing the needs of the elderly in our Indian pueblos, we will be following the spirit of this hearing: "The Relationship Between Nutrition, Aging, and Health."

Thank you for this opportunity to testify on behalf of the Indian elderly in the State of New Mexico. Before I leave my seat, I would like to say Merry Christmas to all of you and a happy long life, and a prosperous New Year.

Thank you.

[Applause.]

Senator BINGAMAN. Thank you very much for that testimony.

Let's go on to the testimony from Mrs. Candelaria, who lives in Bernalillo. She has participated in the nutrition program since 1972 and she is going to be giving her testimony to us in Spanish. Becky Bustamante will be translating that for us.

Thank you very much for being here.

STATEMENT OF SUSIE CANDELARIA, BERNALILLO, NM, A PARTICIPANT IN THE NUTRITION PROGRAM

Ms. CANDELARIA [translated by Ms. Bustamante]. Ms. Candelaria has said that she is very happy with the meals that she is getting now through the nutrition program. She has been participating since 1972 and she has seen some changes in the nutrition program.

Now the meals are healthier in that, before, some of the food they used to eat at the nutrition program was very heavy. When they went home, they didn't sleep very well. They just didn't have the energy that they have now.

She is noticing, in the nutrition programs now, that there is an emphasis on fruits and better nutrition in the food. She feels that it is helping the senior citizens a lot because they have more energy; they feel better; they are happier; and they are sleeping a lot better than they had been before.

So she is very thankful for the changes that have been made in the program these past few years.

She also says that we are asked to remember that not only are these kinds of changes taking place at the nutrition programs, but that we have to take that emphasis and do it at home, too. So at home we should concentrate on getting good foods, healthier foods, lighter foods, and make sure that they are not cooked with the heavy fats. Our body will feel a lot better.

She wanted to thank everybody for allowing her to be here and that is what she wanted to say.

Senator BINGAMAN. Thank you very much. We appreciate it.

[Applause]

Ms. CANDELARIA. Ms. Bustamante did a very good job.

Senator BINGAMAN. That's right. You did do a very good job.

Ms. BUSTAMANTE. Thank you.

[The prepared statement of Ms. Candelaria follows:]

PREPARED STATEMENT OF SUZIE CANDELARIA

Yo me llamo Suzie Candelaria, tengo 72 anos y vivo en Bernalillo. Yo y mi esposo hemos participado en el programa de los cuidananos mayores en el condado de sandoval desde que empezo en 1972, y nos gusta mucho. Las comidas que recivimos de este programa han sido una mayor parte de nuestras vidas darias. Este programa nos ha dado la opportunidad de extender nuestros recursos con recibir esta comida. Tambien obtenemos mejor nutricion y calidad de comida. Muchos de los ancianos tienen limitciones en comprar lo que se nececita por falta de recursos adequados. Hoy en dia todo esta tan caro y se nos acaba el dinero muy pronto. A veces no podemos comprar las comidas propias y necesarias para estar saludable. Ya saben que cuando ya uno esta de alta edad hay muchos problemas de salud, dinero, transportacion y otras mas. Los servicios de comidas que provee el programa de los cuidanos mayores nos asegura una tercer parte de los requerimentos nutricionales que son importante para tener buena salud. Tambien cuando vamos al centro a comer nos da mucho animo y placer en compartir nuestro tiempo y vidas con otras personas, compadres, vecinos e amigos. Cuando uno come su comida a solas es tan trieste que a veces se nos quita el apetito. Nos gusta mucho platicar y visitar con otra gente y nos sentimos feliz en pasar unas cuantas horas disfrutando del carino y amor de las amistades y con el personaje del programa que nos ayuda tanto. Este tiempo es muy importante para nosotros. Hay un dicho que dice que el hombre nececita mas que pan para sobrevivir. Yo me siento muy orgullosa de ser parte de este programa.

Senator BINGAMAN. Our final witness on this panel is Simon Lopez, who lives in Las Vegas, NM. He's a member of the advisory council for the Mora-San Miguel Senior Citizens, which is responsible for delivering the nutrition services for seniors in Mora and San Miguel Counties.

We are pleased to have you here today and we look forward to your statement.

STATEMENT OF SIMON LOPEZ, LAS VEGAS, NM, MEMBER OF THE ADVISORY COUNCIL, MORA-SAN MIGUEL SENIOR CITIZENS, INC.

Mr. LOPEZ. Senator Bingaman, members of the Senate Special Committee on Aging, it is indeed a pleasure to be here this morning before you. I appreciate the opportunity to be able to testify on behalf of my fellow senior citizens.

As a member of the advisory council for our senior citizen program in the counties of Mora and San Miguel, I have had the opportunity to see the results of good nutrition over a period of 5 or 6 years. I myself, retired about that many years ago.

Being a widower, I can assure you that being able to attend a senior citizens' center where they provide us with nutritious meals for 5 days per week has certainly benefited myself tremendously. However, let me tell you of what I have observed in our own program.

The Mora-San Miguel Senior Citizens, Incorporated provides many related services to our senior citizens. Among those are congregate meals at our five centers located in the communities of Las Vegas, Mora, Pecos, Wagon Mound, and Villanueva. At these same communities, we also provide home-delivered meals to senior citizens who are bedridden or otherwise unable to leave their homes to attend the centers.

Gentlemen, if you have ever had the opportunity to visit a senior center, especially ours in Las Vegas, you would see that on any given day the center is crowded to over capacity, all senior citizens. Our entire program provides over 350 congregate meals and approximately 40 home-delivered meals daily, 5 days per week. This,

alone, should tell you that there is a need for good nutrition for the aging.

I believe that the clue here is that as we grow older and our families leave us we are many times left alone and I don't have to tell you how it feels to eat alone; and how about shopping for one person? Have you ever seen a senior citizens shopping cart?

I believe that this might be a typical shopping list for some senior citizens: two TV dinners, one 6-pack of Coke, one box of chocolates, one box of donuts, and one small jar of instant coffee.

Now, tell me, is this a way for a senior citizen to receive a nutritious meal?

Even if you were to buy good and nutritious food, there is always the problem of cooking; but let me tell you, our program meals are planned by professional staff. The Area Agency of Aging and the State Agency of Aging monitor these programs very closely.

Each meal served at our center provides at least one-third of the daily nutrition required for an adult. I feel that most of the time it provides much more. Especially for those of low and fixed incomes, it might be the only food they received for that particular day.

I believe that good nutrition is very much related to good health. I also believe that if good nutrition is provided health-related problems will be fewer.

Now, some of the important activities and services provided in our center in Las Vegas are as follows: The most essential service and activity, as I have already mentioned, is the service of noonday meals. These meals are served daily Monday through Friday from about 11:45 to 12:30 p.m.

People start coming to our center about 9:30 a.m. or before. Why so early? Well, we come early because we want to associate with our primos and primas, compadres and comadres. You notice I use Spanish to express good will and friendship, and being intimate.

It is then that we joke, we talk, we exchange ideas. We tell chistes, adevinanzas, and cuentos. These words, in English, mean jokes, quotations, and riddles. Some seniors know many of these jokes and others don't, but we all listen and have a good time. [Laughter.]

It is a lot of fun and all of this really means a lot to all of us there.

Now, after lunch, some seniors play bingo on Mondays and Wednesdays, and a game known as pokeno is also played on Mondays, Tuesdays, Wednesdays, and Thursdays.

Other services and activities provided by our program are, well, shopping assistance for the elderly; escort service for the elderly; information and referral; nutrition education; transportation; income tax assistance; blood pressure checkups; and legal assistance and other things.

Occasionally, we invite local attorneys to talk to us and they talk to us on such subjects as wills, property, transfers of property, and other legal matters. They also answer questions asked by the audience.

General legal advice is good information, I believe, to the elderly.

Now, something big for us was the campaign and election for a bond issue to build a new senior citizens center. This was an exciting thing. It took place in July 1984.

We formed a big coalition composed of the different senior citizens' groups to campaign for the bond issue. Other groups who joined us were the National Retired Teachers Association, the American Association of Retired Persons—I am a member of that organization also—the Public Employees' Retirement Association, the Citizens in Maximum Activities—CIMA, Foster Grandparents and women's clubs.

We won big, by about a 4 to 1 ratio, in favor of the bond issue. It was a $275,000 bond issue.

Thanks to God, the new center is now being built and hopefully will be available for use by April of this next year. We will be very proud of this beautiful 8,000-square-foot building, which will be enjoyed not only by the seniors of today but also by the seniors of tomorrow.

Now, ladies and gentlemen, we also have our problems and difficulties and reverses in our centers. Let me give you an example. This thing does not give much mental nutrition or health to my buddies who handle the business of this program.

At the present time, there is a civil action case pending in the Fourth Judicial District of New Mexico. The defendant is a Mora-San Miguel senior citizens' organization. The plaintiff is a gentleman who is suing us for breach of an employment contract.

The gentleman, who was discharged, was a driver of one or our center vans. He is claiming, among other things, punitive damages in the amount of $15,000. I understand that this gentleman received complete unemployment compensation benefits, but he is suing for additional damages nevertheless.

It is not proper, I believe, to discuss the merits of the case now. It is up to the court to decide who is right and who is wrong. It is not our intention to interfere with the administration of the court.

However, it is not improper for the public to know and be informed of the issues and what is happening. In this case, where many poor senior citizens are actually defendants why is it in that this great Government of ours, with so many public agencies to defend the poor and the elderly, there appears to be no defense relief available to the senior citizens of Mora and San Miguel Counties?

The plaintiff is represented by a public agency known as the Northern New Mexico Legal Services, Inc. It seems that this public legal agency, which is supported by public funds, could be providing legal advice and defense to the many senior citizens of the Mora-San Miguel organization rather than taking us to court to obtain damages from us. What are their priorities?

It is not a matter of the senior citizens being liable or guilty, or not being liable or guilty. It is not a matter of us being the plaintiffs or the defendants.

It is just simply a question of who is supposed to represent our many elderly and poor in a civil action of this nature? Our organization has, however, engaged the services of a private attorney to represent us in the above case.

In closing, I want again to remind you that good nutritious meals are the best insurance that people will remain healthy throughout their lives; and I ask that you support senior citizens centers throughout the Nation.

Thank you very much. [Applause.]

Senator BINGAMAN. Thank you very much.

Let me just ask a couple of questions and then, perhaps, Dr. Blumberg has a question or two he would like to put to this panel.

Mr. Keevama, let me ask you: We had a hearing in June in Gallup. This hearing was done under the auspices of the Senate Select Committee on Indian Affairs. One of the issues that came out very strongly, was the problem of the greatly increasing incidences of diabetes among Indian people in this country.

Out in the Gallup area, of course, was mostly where we were talking about; but I wonder if that is something that you have encountered or are aware of in your position looking into the problems of Indian elderly.

Mr. KEEVAMA. Yes, I am aware of that. You know, in different sections of reservations and communities, you take the Gallup area, their diet, as far as I know throughout the vast reservation of the Navajos, is much different than the Pueblos' diet.

So maybe in there there is something that creates this situation; but, you know, not being very knowledgeable about how all sicknesses are created, I just don't know what the cause of it is. Maybe perhaps we could do some research into some of the diets.

Senator BINGAMAN. OK.

Mr. KEEVAMA. I know that in Navajo country your mutton stew, I believe, is a main diet and it is delicious. Then among our people, of course, we have the chili, the papias and all of that. Somewhere in there, something is wrong.

Senator BINGAMAN. All right.

Let me ask, if I could, Ms. Lopez and also Mr. Lopez—no relation—either one of you, if you would have any thoughts on the question of home-delivered meals out of the senior centers.

I have been concerned that people who are not able to get out and go to senior centers are really not able to do a whole lot for themselves, and are dependent upon these home-delivered meals. Yet most of the programs that we have in the State try to deliver those meals 5 days a week or even fewer.

Is that a problem that we should be worried about? I mean, should there be some provision for home-delivered meals on a weekend for people who are shut-in? Is that something that makes sense, in your opinion, Ms. Lopez?

Ms. LOPEZ. I would think so, Senator Bingaman. My concern, of course, is mainly for myself because I am getting older; and I would very much appreciate, when I am no longer able to get to the nutrition center, to have a meal delivered to me.

I understand there is a meals-on-wheels or something. They charge you quite a bit. People on a low income cannot hardly afford it.

But where I was the manager, we delivered at least 10 meals a day; but one of our members would do it. We did not have the facilities to deliver the meal.

Yes, I believe it is very important; and, like, you say, on the weekend.

We always make a joke at the center: Well, we will go hungry on the weekend, you know. It is not really true, but it might be true of people that cannot cook; that are blind or I don't know what.

I don't know how to say it, but a lot of people cannot do things, maybe because they are so sick or depressed. Depression is a very bad thing and it comes through to you by nutrition; I know that. If you are in a depression, it is hard for you to get up and cook a meal or even go somewhere, or even get out of that nightgown and wrapper that you are in all day long.

I had a little experience with that when I lost my husband. So, yes, I believe that meals delivered would be very, very good; very beneficial to our people.

Senator BINGAMAN. Thank you very much.

Mr. Lopez.

Mr. LOPEZ. She said it all, I think. I agree with her. Some of those people, it is a good thing for them to get the meals at home, you know. I mean, it means much to them.

You don't realize how much it means to them, but it really means much to the poor. They need someone to go and see them and take them one meal. I think it's a good thing.

Senator BINGAMAN. OK.

Mr. LOPEZ. I really believe it is something needed.

Ms. LOPEZ. My daughter-in-law delivered meals for a while for the meals-on-wheels and she would say, "They don't let you go. The people want to talk to you so much," you know. It would make her late to deliver the other meals because the person just clung to her to talk to her.

That's why I mentioned the companionship that the nutrition program gives to us.

Senator BINGAMAN. OK.

Yes, sir?

Mr. KEEVAMA. May I add something to the delivery and the meals at the site?

We have not really looked into the situation where the people that have diabetes. They eat the same kind of food that is prepared for us. I believe we need to do something about that.

We may have to fix special food for their special diet; but everybody that goes there eats the same type of food. This is what we are looking at.

Senator BINGAMAN. Let me just ask one final question of anybody who may want to comment on it.

To what extent do any of these nutrition programs that you are familiar with try to actually educate people on how to eat better? I mean, is that part of what goes on at the senior center in Las Vegas or Albuquerque, or wherever?

Is this something that is part and parcel of the program, or is that part always ignored?

Ms. LOPEZ. No. We have had people, like Dr. Blumberg, talk to us about how we could eat and exercise, and everything. We have people real concerned on that.

I know that when I was manager at the mealsite, I also told them what they should do on the weekend when we were not serving them meals. Also, I used to stress cleanliness with people.

We do invite doctors and nurses to come over and speak to us. I don't know if the other programs do, but ours does.

Senator BINGAMAN. Anybody else have a comment on that?

[No response.]

Senator BINGAMAN. Doctor, go ahead. Do you have some questions?

Dr. BLUMBERG. I would just like to say that I think that all the comments were excellent and really underscore what some of the best nutrition experts in the country are really, now, documenting. It is evident that you already know.

Certainly, Ms. Reynolds' comments that nutrition is more than just food, that it is really a social experience and the companionship is an important element to it. I would also add, certainly, physical exercise as part of some of the other congregate feeding programs is probably almost as important as the meals themselves.

I would address one question to Ms. Reynolds. You mentioned that you get a lot of your information and advice from magazines. Are there others—nutrition specialists, registered dieticians or pharmacists or physicians—that are readily available to provide you with nutrition advice that is more specific to your needs than a magazine article could address?

Ms. REYNOLDS. Well, I, personally, have gotten a lot of information from a nutritionist. I think that that's probably my biggest source, but I also read Prevention magazine and other magazines. If I don't get them, I can find them in the library.

Dr. BLUMBERG. What sources do you have other than magazines?

Ms. REYNOLDS. A nutritionist.

Dr. BLUMBERG. Ms. Lopez, you mentioned the congregate meal program. Several of you have.

I was wondering, who was involved in helping design those programs and what the diets should be? Do you know who gave you the input on that?

Ms. LOPEZ. No, I don't; but I believe the cooks are—when I was the manager, they also sent us a questionnaire on people who were eating their meals, that they wouldn't be thrown away. If something was, then they would stop serving it.

But they do have meetings on nutrition, you know, because when I was on staff we were obligated to answer questions and help people out with their problems.

Dr. BLUMBERG. At the time, you feel that there was an evaluation afterwards that meals were being eaten and the people felt that they were helpful?

Ms. LOPEZ. Yes.

Dr. BLUMBERG. From some of the comments I heard Mr. Keevama make, I am not sure why when meals are being provided; if there could not be someway that the nutrition education that you ask for could not somehow be provided along with just delivering the meals.

It is just the driver who presents the meal and then goes away, or is there a nutritionist involved in that?

Mr. KEEVAMA. We do have the drivers that deliver meals. However, we are into that now because I think it is necessary that we have some knowledge, especially the cooks, of what is good and

what is bad; but we do have workshops and our cooks are pretty knowledgeable about how our diets should be, the balanced diets.

So we get good meals.

Dr. BLUMBERG. Good.

I particularly appreciated Ms. Candelaria's comments about how she's learned from the meals that she's received and been able to take those home and translate them into her own diet changes showing that people can, in fact, change their diets to those which are more healthful.

I actually don't have any more questions, but I will use the brief opportunity of sitting up here to relate one story of the study that was done in Boston among several hundred people, who were chosen because of low blood hemoglobin levels, with low iron levels.

The study question was: Would iron supplementation improve their status? They had a control group that received no supplement and a group that received an iron supplement, and they all got together once a day, 5 days a week for a noontime meal.

When the study was over and they evaluated the participant's status, they found that everybody's nutrition improved, everybody's blood values improved and it wasn't the nutrition supplement, but the mere provision of one healthful meal a day in a setting where there was companionship and socialization: that that was more important than the iron pill.

Ms. LOPEZ. That is what I stressed. That milk that they give us each day is very, very important. I know there are a lot of elderly people give theirs away or don't drink it, but I drink more milk now than I ever did before.

I used to live on coffee, practically; but that milk that they furnish us every day is very important to our health.

Senator BINGAMAN. All right.

We thank everybody on the panel for their excellent testimony. I think I will have a 5-minute recess here while the next panel comes forward.

The next panel is going to talk about the Government perspective on these problems.

Thank you very much.

[A brief recess was taken.]

Senator BINGAMAN. We will hear from our second panel. This panel is to discuss the Government perspective on all of this.

First of all, several of the people in the audience have said they have had a little difficulty hearing the first panel so if you folks would speak right into the microphones, that might help some.

Let me introduce our panel. Our first witness is Rita Maes, the director of the State Agency on Aging. She is going to testify on the Government perspective on this relationship between nutrition, aging and health. She has been working with senior citizen programs for many years; and prior to being appointed director of the State Agency on Aging she served as the director of the Senior Citizen Program for the city and county of Santa Fe.

She has worked with senior programs at the grassroots level. In her new position, she knows the problems of older New Mexicans. We thank her very much for being here.

So go right ahead.

STATEMENT OF RITA MAES, SANTA FE, NM, DIRECTOR, NEW MEXICO STATE AGENCY ON AGING

Ms. MAES. Thank you. Good morning, Senator.

Senator BINGAMAN. Good morning.

Ms. MAES. Ladies and gentlemen, members of the panel, I am going to forgo most of the testimony in reference to the history of senior centers and how they develop nutritionally.

I want to commend the panel that was up here before us, the consumer panel. They spoke very well and depicted the picture of what was going on in the senior centers and how the emphasis and the shift has been directed into more help.

I would like to give you a little bit of a review of what our budget looks like and then probably go into some unmet needs and the continual needs of the elderly, and then some recommendations on the behalf of the State Agency on Aging.

My office, of course, received Federal dollars. We are authorized to implement Older American Act dollars in conjunction with State dollars. From the Federal Older Americans Act, we use $1,175,902 for congregate meals and $323,144 for home-delivered meals. These funds are supplemented by the New Mexico State legislature in an amount of $1,052,809.

With these funds, it is estimated that 24,000 persons received a total of 1,283,520 congregate meals in the period October 1, 1984 through September 30, 1985. In the same period, approximately 6,000 homebound individuals received 459,572 home-delivered meals.

These dollars represent 16 percent of our total budget and our budget is broken down into transportation, recreation, INR, advocacy, investment programs, and several other—senior companions, Foster Grandparents. But 16 percent goes toward nutrition.

We fund 29 programs in the State to provide these meals. These figures represent only those meals provided with funding from the State Agency on Aging.

The title VI Indian Senior Citizen Programs also serve meals in the various pueblos and reservations. Many community organizations provide meals-on-wheels or similar nutrition services without any Federal or State support.

I think what I would like to say, addressed to your remarks earlier, Senator, and some of the remarks that Dr. Blumberg made earlier: We have some programs that are still within the public school system, and these meals are designed for children. The RDA is different, as mentioned earlier.

However, while this is primarily in the Colfax area where I was visiting last month, we only are able to provide meals 3 days a week in the Colfax area within the school system. But oftentimes, even though the RDA for the child and the menu is a lot different—and it may be just hamburgers and hotdogs—that is probably a better meal than a senior citizen going to the store and paying 75 or 80 cents for a can of spam, which is probably a primary diet within the low-income elderly, primarily the Hispanic elderly.

I am speaking through the experience of being the local provider when I would go into the home. Many times, their diet is just potted meat and crackers during the lunch period if they're not uti-

lizing the congregate meal system. It is a very, very critical situation.

In terms of the unmet needs, any discussion of nutritional services provided by the State must include our awareness of the increasing need among older persons. Having a meal that meets one's minimum daily requirement for these special nutrients is often the determining factor in whether a senior remains healthy and active, or moves into a period of deteriorating health and dependence.

Nutrition is a basic component in the management of the major chronic diseases, cardiovascular, diabetes and, now, cancer. With this in mind, it is increasingly important to address nutrition seriously as we develop our plans for the future delivery of primary and long-term care. Everyone recognizes that we must now focus on prevention and risk reduction in health care if we are to make maximal use of our public health care dollars.

The prevention of one's institutionalization saves significant dollars that can be used to help many people remain in their homes and their communities. It is difficult to estimate, in hard numbers, of the number of people that would access congregate milk programs if there were room for everyone.

The area agencies on aging do receive requests continually for the expansion of the nutrition sites. For example, the Southwest AAA is currently holding two requests to open new sites, and this is also true in the eastern plains of New Mexico.

We made construction dollars available, however, we have not been equally successful in making the operating dollars available so that we can provide the active service—transportation of nutrition—when we are looking at expansion areas.

This is especially frustrating for them because, as one AAA director said recently, I know it's not just nutrition the seniors on these sites will not get. It is access to the entire continuum of care.

Let me address this continuum of care to get some sense of how the need for nutrition services is increasing and will continue to do so in the future. One measure is to look at those needing assistance.

Persons who need help with their activities of daily living usually need nutritional services. The inability to prepare a daily meal can mean the difference between living at home or having to be institutionalized.

The home-care supplement to the National Health Interview Survey, conducted during 1979 and 1980, obtained information on the need for assistance in essential personal care and home management activities. The proportion of elderly persons needing help in this area increases dramatically in the upper age ranges.

While only 6.7 percent of persons in the 65 to 74 age range needed the help of another person, this figure doubles, to 15.7 percent, in the 85 and over age group. By the same token, 34.8 percent of the persons 85 plus need help in one or more basic activities and 26 percent need help going outside the home.

Clearly these are the most frail of our aging population. However, they are also those most in need of services such as nutrition so that they do not become dependent on Medicaid dollars for exten-

sive premature institutionalization—and that's often the case, and it is a very, very frightening statistic.

This 75 plus group is also the fastest growing segment of the population. By the middle of the next century, the relative number of those 75 plus to the total population is projected to be 1 out of 8 and will be greater than the current proportion of 65 plus individuals to the general population, which is now 1 out of 9.

These trends have far-reaching policy implications because it is these older individuals who have the greatest need for social, income, housing, and health services. It is through congregate mealsite or home-delivered meals that they could gain entry to information and referral, and other systems.

Addressing the needs of the old-old does not fully represent the need which nutrition programs address. Another way to reflect the need in New Mexico is to acknowledge the fact that elderly persons in New Mexico live on very low incomes.

The American Association for Retired Persons reported that the median household income of the elderly is only half of the nonelderly. Elderly women living alone experience a 33-percent poverty rate with 85 to 95 percent of them dependent solely on Social Security and FSI. For minority elderly, projections indicate an over 40-percent poverty rate.

The truth is that good food costs money and when decisions as to whether to be warm or hungry have to be made, the quality of one's nutrition may go down. The provision of one balanced nutritious meal per day can make a major difference in a low-income person's quality of life, not to mention the socialization and access to health services available through nutrition programs.

In terms of implementation of the recommendations, I would just like to say that we would need your assistance, Senator, in the repeal of the authority of the Secretary of Agriculture to reduce the per-meal level. This is House bill 2453, which has passed the House and is now being reviewed in your committee. I think it might have moved out of that committee.

What that does, that provides the senior programs with a cash-in-lieu reimbursement rate. We were threatened recently to have that reduced. That would have very strong implications on our programs because that would have to reduce the amount of milk that we can serve.

Although I talked about the budget being 16 percent of our total budget going to nutrition, that is not enough. That is definitely not meeting the needs of the elderly population in need of nutritional services.

I think I mentioned 24,000 elderly in New Mexico are coming to our congregate sites and 6,000 are receiving home-delivered meals. We have, in New Mexico, approximately 200,000 senior citizens. So you can see that the dollars—although I feel they are being used in a very cost-effective manner, we are not able to reach the entire segment of the population in terms of the elderly poor because the dollars just are not sufficient for this operation.

Second, I would also like to recommend more flexibility be given to the State offices and area agencies in the use of their service dollars. The AAA's cannot readily use these funds to hire nutrition-

ists, yet they are primarily responsible for ensuring the quality of nutrition services at the local levels.

Two AAA's, as mentioned earlier, felt the need to be so great that they used one-time funds to hire nutritionists. This is difficult because this is a one-time expenditure. It is difficult to go out and hire a person knowing that that person is going to be on it for 1 year.

But what I have seen thus far by the use of these nutritionists in our area agencies on aging, they have made an impact in assisting and developing good, sound menus, cost-effective menus to the elderly and to the local providers.

When we went into reorganization, we did lose our nutritionist at the State level. We are still trying to secure some dollars to secure that position at the State level so that we can plan meals more effectively for the area agencies and the local providers.

A lot of the local providers, and one of our area agencies on aging, are utilizing the existing resources in the communities such as hospitals, home-health extension offices, home economics, the colleges—utilizing those resources to help us develop menus in New Mexico.

Third, we need to recognize the hard-working commitment of other community programs in providing nutrition for the elderly. Local groups, such as the Storehouse in Albuquerque and the Workers That Care of the Alliance of Churches, provide food in situations of extreme stress or emergencies and are to be commended for what they can accomplish with very limited resources.

Again, this is often a one-time, last-minute, acute rescue. It does not provide for the ongoing, day-by-day needs that many people have.

Recognition and appreciation should also be extended to the county extension agents who voluntarily provide nutrition consultation and education to many mealsites. This reflects the personal dedication of individual extension agents.

Finally, I cannot emphasize strongly enough how important we feel the provision of nutrition is within the aging services' continuum. The United States has a reputation of being a Nation that does not prevent fires until it smells smoke.

Clearly, we know we face an aging population in the future, and that now is the time to build a system to meet the needs. We are also aware that acute primary care uses up the majority of our health care dollars and serves relatively few people.

If we are to change this, we must commit to providing the resources necessary to build programs that meet basic needs and reduce people's risks of health problems. Funds to provide nutrition services in areas now not currently served are needed as well as to expand services where the demand is currently not being met.

As I indicated earlier, we know that an increase in nutrition services will raise the demand for social services. As mentioned earlier by the last panel, the two go hand-in-hand.

We are prepared within the aging network in New Mexico to communicate and coordinate with all those involved in a nutrition services delivery system. We will make every effort to use our funds as efficiently and as effectively as possible.

What we cannot do is generate the financial resources at the State level. Our hope is that these hearings reflect a growing awareness at the national level of the importance of nutrition in maintaining basic quality of life as well as the most cost-effective use of health care dollars.

Thank you, Senator Bingaman, for the opportunity to speak before your committee.

Senator BINGAMAN. Thank you very much for that testimony. I appreciate it.

[The prepared statement of Ms. Maes follows:]

PREPARED STATEMENT OF RITA B. MAES

INTRODUCTION

Good morning Senator Bingaman, members of the panel, ladies and gentlemen. I am Rita Maes, Director of the New Mexico State Agency on Aging. Thank you for the opportunity to speak to you concerning nutrition and the elderly. Having served as a senior citizens program director for seven years before assuming my current position I am well aware of the operations of local nutrition programs, their successes and failures and the impact of these services on the elderly.

In the historical development of senior citizens programs there has been a shift in emphasis and direction. Early senior centers focused on the social aspects, companionship and recreation. As these centers became popular they began to respond to other needs. Program directors recognized the fact that many older persons could not get to services, did not know what services were available, could not comfortably participate in activities if they were hungry, unhealthy, or were too busy trying to remain independent and alive. The centers responded by supplementing their activities with transportation, information and referral, nutrition and other services.

The development of nutrition services both at congregate settings in senior centers and in the home with home delivered meals—meals on wheels, provided a method of addressing several areas of concern. The meals program provided a daily, nutritionally balanced meal. It also provided an opportunity for participant interaction, combatting isolation. Having people in one location made it easier to provide other services such as consumer education, nutrition education, counseling and health promotion.

The nutrition programs for the elderly have become a key element in the delivery of services to the elderly. The State Agency on Aging remains committed to the continual improvement of the meals program and to efforts to expand the programs. We view the nutrition program not just as a "feeding" program but a multi-faceted program which includes the meal, education, health promotion efforts, and other support services. We recognize that nutrition programs must be coordinated with other services and programs outside the aging network that seek to improve the health and nutrition of the elderly. The work of the County Extension Agents, Health and Environment Department Adult Health Services, Human Services Department, and American Association of Retired Persons and other advocacy groups all must combine and coordinate to provide the best services to the elderly. We know that we cannot do it by ourselves.

THE NEW MEXICO NUTRITION PROGRAM

Let me give you some information about the nutrition program for the elderly in New Mexico. My office receives federal and state funds to operate nutrition programs for the elderly in New Mexico. At present we budget, from the federal Older Americans Act, $1,175,902 for congregate meals and $323,144 for home delivered meals. These funds are supplemented by the N.M. State Legislature in an amount of $1,052,809. With these funds it is estimated that 24,000 persons received a total of 1,283,520 congregate meals in the period October 1, 1984 through September 30, 1985. In the same period approximately 6,000 homebound individuals received 459,572 home delivered meals. These dollars represent 16 percent of our total budget—this is a big business. We fund twenty-nine programs in the state to provide these meals. These figures represent only those meals provided with funding from the State Agency on Aging. The Title VI Indian Senior Citizen Programs also serve meals in the various pueblos and reservations. Many community organizations pro-

vide meals on wheels or similar nutrition services without any federal or state support.

The development of the nutrition programs in New Mexico has spanned about thirteen years. As you know the programs were first authorized under the Older Americans Act in 1972. At that time the state office directly contracted for the programs in the state and a targeting approach was used to develop programs in key areas of the state. Those early years saw an intense effort to develop programs as quickly as possible and to feed as many people as possible. The first state funds in support of these efforts were realized in 1974.

With the consolidation of programs under the Area Agencies on Aging in 1978, a leveling off of funding began. At this time efforts were made to develop programs in sections of the state that had not been targeted by the state office. More emphasis was placed on the development of nutritionally sound menus, increased training for staff, development of menus that reflected the cultural preferences of the people being served, and improvement of the meal preparation process and financial management capabilities.

In the 1980's we have continued efforts to increase the capacities of the staff, develop better management techniques, and improve the meal preparation process. We have used federal and state training dollars to provide continued training to local program directors. The reorganization of the aging network in New Mexico during 1982 and 1983 had a considerable impact on these efforts. A reduction in staff in my office resulted in the loss of the person who served as state nutritionist. With the realignment of planning and service areas new area agencies on aging had to be designated. None of the previous AAA staff were hired, therefore, we have had to provide much training to the new staff members.

As a result we have placed a great burden on local programs to individually be responsible for the quality of the meals being provided. Local programs have continued to obtain assistance in this area from various sources. Some programs have continued to contract with nutritionists to assist them in menu development that meets daily requirements. Other programs have sought the assistance of their county extension staff or nutritionist with local schools, hospitals or other facilities. The new AAA's have also addressed this concern. Two of the AAA's have used short term funding to hire nutritionists in order to develop nutrition capacity both at the AAA and the local level. Another AAA has intensified an effort to tap the nutrition resources of local hospitals and colleges. We have supported these efforts by continuing to use training funds to provide nutrition training on a statewide basis. I will continue to seek state funds to fund a nutritionist position in my office. In the meantime we have a person with a nursing and health background that will be coordinating our statewide efforts. Other staff such as the field representatives continue to work with the AAA's using previously developed resources to monitor and assess the nutrition services currently being provided.

The provision of nutrition services in New Mexico has relied heavily on two other sources: USDA commodities program and participant contributions. Until the late 1970's local programs used commodities to assist in meal preparation. Because of problems with storage and the over supply of such items as catsup and peanuts, the state elected to receive cash in-lieu-of commodities. These funds provide half of the dollars necessary to buy raw food. Many of the local programs have assisted in the distribution of commodity food to the needy. In many cases USDA has allowed the remaining items to be used by the nutritition programs.

UNMET AND CONTINUALLY GROWING NEED

Any discussion of nutritional services provided by the state must include our awareness of the increasing need among older persons. Having a meal that meets one's minimum daily requirements of essential nutrients is often the determining factor in whether a senior remains healthy and active or moves into a period of deteriorating health and dependence. Nutrition is a basic component in the management of the major chronic diseases—cardiovascular, diabetes, and now cancer. With this in mind, it is increasingly important to address nutrition seriously as we develop our plans for the future delivery of primary and long term care. Everyone recognizes that we must now focus on prevention and risk reduction in health care if we are to make maximal use of our public health care dollar. The prevention of one person's institutionalization saves significant dollars that can be used to help many people remain in their homes and in their communities. For a detailed discussion of the specific nutritional needs of the elderly I refer you back to your 1984 hearing on the rural elderly and remarks of Pat Cleveland from the N.M. Health and Environment Department.

It is difficult to estimate in hard numbers the number of people that would access congregate meal programs if there were room for everyone. The Area Agencies on Aging do receive request continually for the expansion of their nutrition sites. For example, Southwest AAA is currently holding two requests to open new sites, with no expectation of increases in funding. This is especially frustrating for them because, as one AAA Director said recently, "I know it's not just nutrition the seniors in the new sites won't get. It's access to the entire continuum of care."

Let me address this continuum of care to get some sense of how the need for nutrition services is increasing and will continue to do so in the future. One measure is to look at those needing assistance. Persons who need help with their activities of daily living usually need nutritional services. The inability to prepare a daily meal can mean the difference between living at home or having to be institutionalized. The Home Care Supplement to the National Health Interview Survey conducted during 1979 and 1980, obtained information on the need for assistance in essential personal care and home management activities. The proportion of elderly persons needing help in these areas increases dramatically in the upper age ranges. While only 6 percent of persons in the 65 to 74 age range needed the help of another person this figure doubles to 15.7 percent in the 85 and older age group. By the same token, 34.8 percent of persons 85 plus need help in one or more basic activities, and 26 percent need help going outside the home. Clearly these are the most frail of our aging population. However, they are also those most in need of services such as nutrition so that they do not become dependent on medicaid dollars for expensive, premature institutionalization.

This 75 plus group is also the fastest growing segment of the population. By the middle of the next century the relative number of those 75 plus to the total population—projected to be one out of eight—will be greater than the current proportion of 65 plus individuals to the general population—now one out of nine. These trends have far reaching policy implications because it is these older individuals who have the greatest need for social, income, housing and health services. It is through congregate meal sites or home delivered meals that they could gain entry to information and referral and other systems.

Addressing the needs of the "old" old does not fully represent the need which nutrition programs address. Another way to reflect the level of need in New Mexico is to acknowledge the fact that elderly persons in New Mexico live on very low incomes. The American Association of Retired Persons reported that the median household income of the elderly is only half that of the non-elderly. Elderly women living alone experience a 33 percent poverty rate with 85 to 95 percent of them dependent solely on social security or SSI. For minority elderly, projections indicate an over 40 percent poverty rate. The truth is that good food costs money, and when decisions as to whether to be warm or hungry have to be made, the quality of one's nutrition may go down. The provision of one balanced, nutritious meal per day can make a major difference in a low income elderly person's quality of life—not to mention the socialization and access to health services available through nutrition programs.

IMPLICATIONS AND RECOMMENDATIONS

As the Director of the State Agency of Aging and as a past director of a local program I wish to present some implications and recommendations for your consideration. First, it is now fully recognized that nutrition plays a vital role in the prevention and control of disease and in reducing one's risk of minor health problems becoming major, acute, expensive incidents. If we are to truly support this knowledge, commitment must be made to providing the funds necessary for elderly nutrition programs. Specifically, House Bill 2453, which has passed the House, is now being reviewed in your Committee. It provides valuable assistance to America's low income elderly by increasing the level of assistance per meal in the surplus commodities program to 56.76 cents. It also repeals the authority of the Secretary of Agriculture to reduce the cents-per-meal level. U.S.D.A. Cash in-lieu-of Commodities provide over $800,000 annually to supplement the our nutrition programs. The very recent threat of the per meal reimbursement rate would have negatively affected the number of meals that could be served in New Mexico. We are a small state, can you imagine the impact it would have had in New York or California? It is very important to pass this bill and use it as an indication that the provision of support for life's basic needs will not be eroded by power politics in Washington.

Second, I would also recommend that more flexibility be given to the states offices and area agencies in the use of their service dollars. The AAA's cannot readily use these funds to hire a nutritionists. Yet they are primarily responsible for ensuring

the quality of nutrition services at the local level. Two AAA's, as mentioned earlier, felt the need to be so great that they used one time funds to hire a nutritionist. This is difficult, however, because it's hard to keep someone who knows their funding will end in a year. The AAA's very much want to build their education and quality control programs and should be allowed to use their service dollars to do so.

Thirdly, we need to recognize the hard work and commitment of other community programs in providing nutrition for the elderly. Local groups such as the Storehouse in Albuquerque and the Emergency Care of the Alliance of Churches provide food in situations of extreme stress or emergencies and are to be commended for what they can accomplish with very limited resources. Again, this is often a one time, last minute, acute rescue. It does not provide for the ongoing day by day need that many people have. Recognition and appreciation should also be extended to the County Extension Agents who voluntarily provide nutrition consultation and education to many meal sites. This reflects the personal dedication of individual extension agents.

Finally, I cannot emphasize strongly enough how important we feel the provision of nutrition is within the aging services continuum. The United States has a reputation of being a nation that does not prevent fires until it smells smoke. Clearly, we know we face an aging population in the future and that now is the time to build a system to meet their needs. We are also aware that acute, primary care uses up the majority of our health care dollars and serves relatively few people. If we are to change this, we must commit to providing the resources necessary to build programs that meet basic needs and reduce people's risks of health problems. Funds to provide nutrition services in areas now not currently served are needed as well as to expand services where the current demand is currently not being met. As I indicated earlier we know that an increase in nutrition services will raise the demand for social services.

We are prepared within the aging network in New Mexico to communicate and coordinate with all those involved in a nutrition services delivery system. We will make every effort to use our funds as efficiently and effectively as possible. What we can't do is generate the financial resources at the state level. Our hope is that these hearings reflect a growing awareness at the national level of the importance of nutrition in maintaining basic quality of life, as well as the most cost effective use of health care dollars.

Thank you for the opportunity to speak on behalf of New Mexico's elderly.

Senator BINGAMAN. We will use the same procedure as before and hear from the other panel members before we ask questions. Our next panelist is Sonia Crow who is presently the Associate Administrator with the Food and Nutrition Service of the U.S. Department of Agriculture in Washington.

As I understand it, Sonia is accompanied by Gene Dickey, who is the Southwest Regional Administrator for the Food and Nutrition Service, U.S. Department of Agriculture. We appreciate very much the Department of Agriculture being represented here today, and we look forward to your testimony.

STATEMENT OF SONIA F. CROW, WASHINGTON, DC, ASSOCIATE ADMINISTRATOR, FOOD AND NUTRITION SERVICE, USDA, ACCOMPANIED BY GENE DICKEY, SOUTHWEST REGIONAL ADMINISTRATOR, FOOD AND NUTRITION SERVICE, USDA

Ms. CROW. Thank you, Senator Bingaman, members of the audience. It is a pleasure both for Mr. Dickey and myself to be with you today in Albuquerque, especially on such a fine day. Obviously, it is an indication of your commitment to the issues raised at this meeting that you are spending your time inside this nice building instead of out in that beautiful sunshine.

So I certainly appreciate the opportunity to talk to people so very interested in the issues that we are discussing today. Thank you, Senator, for providing us an opportunity to tell you about the USDA's involvement in the issues of nutrition and the elderly.

I have a full statement that some of you may have, and certainly it is available outside if you do not, which I would like to submit for the record. I am going to accept the Senator's suggestion that we try to summarize the statements that we have so we will have more time for your questions and for your comments to us, as well.

USDA, as is the Senator, is very interested in hearing from you as to how you feel programs are working for you and what you feel your unmet needs are.

Since one of the programs under the jurisdiction of the Food and Nutrition Service, our agency, is the Food Stamp Program, along with a lot of other programs—some of which I will talk to you about today—I want to invite Ms. Lopez and all the other members in this audience who feel that they have been getting the run-around and a lot of red tape to please talk to Mr. Dickey and me and other members that we have today from our field office in Albuquerque.

I agree that there is absolutely no reason in the world why the taxpayers in this country don't get the services that are there for them in the Government. You may not always get the answer that you want in terms of whether you qualify or not for a program, but you darn well have a right to get an answer and get it quickly from the people who are here to serve you.

So I hope you remember my name. We will be here after the hearing. If you have specific questions, come and talk to us. We will not know all the answers, but we will make sure that you get them and that you get them quickly because I think that is the least that we can do for you.

As I said, the USDA, the Food and Nutrition Service, is responsible for administering at the Federal level a very broad array of nutrition programs that are designed to assist citizens. Babies, even before they are born, all the way to the more senior citizens in our society, and more focused on the issues that you are discussing today.

We have many programs—in fact 13 of them—at an annual cost of some $20 billion a year, but what I would like to do, with Mr. Dickey's assistance in answering questions, is to focus just on those that are more directly applicable to the elderly portion of the citizens in our country.

The three I am going to focus on are the Food Stamp Program, the Elderly Feeding Program, and also the Temporary Emergency Food Assistance Program—we call it TEFAP because it is less of a mouthful. That is the program that basically has been giving out a lot of commodity distributions for household use, cheese and other commodities. Some of you may have benefited from that program.

Let me start with food stamps. The Food Stamp Program, as you know, is the major nutrition assistance program in the United States. We spent annually, last year, a little over $11 billion providing all of our citizens who are in economic need the opportunity to receive food stamp coupons to assist them.

Recipients take them to the local grocery and buy the food that they need. This is not a program designed just for elderly, but we do have elderly that participate in it and we have special provisions I want to spend a few minutes talking to you about.

Let me back up a second, though, and explain to you something that is not often understood because it is a little confusing to people. The Food Stamp Program is a program that is designed to supplement people's income so that they can go and get adequate food and a nutritious diet.

There is no excuse for anyone in this country to be hungry and not have adequate food resources. Everyone in this country supports that both morally and through their tax dollars; and certainly the USDA also supports that position.

What people don't understand, though, is you don't go and get just a set amount of food stamps. If you're eligible, that does not mean you are eligible for a certain number of coupons.

It really depends on how much money you have both in income and in terms of assets. So people, perhaps such as Ms. Lopez, may have more assets than would qualify them for the program. It's a sliding scale type of program.

You get a certain amount of food coupons based upon the amount of money that you have: if you have more money, you get less coupons; if you have no money, then you get the maximum benefit, and the maximum coupon level is designed to give the average person a full month's worth of food coupons to give an adequate and nutritious diet.

Let me spend just a little time telling you about those special provisions in the food stamp law that are specifically designed to assist the elderly population. They apply only to people who are elderly or who are handicapped. They do not apply to the rest of the population.

This is in recognition of the fact that there is a difference and a different set of needs and standards for our elderly population within the broader Food Stamp Program. For example, there is a different test on whether you qualify or not in terms of net income.

It is sort of technical if I go through it so let me just tell you that the elderly are treated differently. They are given a break in terms of how their net income is calculated for purposes of determining whether they have too much money to be on food stamps or whether they come within the eligibility criteria.

There is an attempt to try to make it easier for the elderly to get food stamps so that elderly people can apply for food stamps at their local Social Security offices at the same time that they are applying for Supplemental Security Income benefits.

There is a recognition that the elderly in our society have more medical needs. So there is not the same restriction on medical deductions for the elderly as there is for the rest of the population in the United States. There are special rules that recognize the special shelter and housing deduction needs of the elderly.

There is a higher assets test for how much money you have saved in the bank: if you are elderly, you can have more money in the bank that is part of your life savings and you will still be able to get food stamps than if you were not within that elderly category. There are no requirements that elderly people in our society sign up for work employment and job registration as there are with other age categories that are eligible for food stamps.

I have done a very, very broad brush stroke. My testimony goes into that in some further detail and, obviously, you can get a lot

more information about those special food stamp provisions from your local and state agencies that administer them in each State.

Let me spend just a moment, since I think it is perhaps of some interest to you, telling you about what the characteristics are of the elderly food stamp recipient. The data that we have is just a snapshot.

In 1982, just remember that, we are quickly approaching 1986 and may I wish you a Merry Christmas as well as the gentleman who so kindly wished it to us on the first panel, and just keep in mind this data is not completely accurate for right now, but it gives us some interesting indications as to who amongst the elderly population is taking advantage of the food stamp benefits that are available to people.

First of all, it is interesting to note that households with elderly members account for almost 20 percent of the total food stamp population, and that by the way is about 36 million during the course of a year and not quite 20 million per month, but people do not stay on food stamps, necessarily, for a whole year. That is why we have up to about 36 million people a year who get food stamps.

While there is 20 percent of elderly within the total food stamp caseload, they don't get 20 percent of the benefits and that is for reasons that, in fact, turn out to be good.

That is because they have more money than most of the rest of the people that are in the Food Stamp Program; and I think that is an encouraging sign. So as it turns out they get 8 percent of the total benefits.

We do find out that most of the people who are getting food stamps who are elderly are single women who live alone. They do have more income than the general food stamp population.

I certainly don't have figures for New Mexico the way Ms. Maes has, but I can tell you that as far as the poverty rate in the United States goes—I think in our society we don't like to think of anyone being in poverty, certainly not anyone being hungry—over the past number of years, I think perhaps one of the most heartening changes that has taken place as a result of a lot of the Government services that the taxpayers have supported in this country is really a remarkably dramatic reduction in the poverty rate for the elderly population.

For example, in 1970, within the elderly population, over 18 percent of the elderly population was what was called in poverty. This is based on a formula. Basically, poverty is defined by the Labor Bureau. It depends on how much income you have.

Eighteen percent of our elderly citizens were in poverty. Thirteen years later—the latest number that I have—actually 1983—just a little over 10 percent were in poverty. Ten percent may still seem like too much, but that change between over 18 to just a little over 10 is almost a 40 percent reduction.

That is, statistically, a remarkable change and I think a tribute to the types of programs that are available through the Government. These programs have had a very, very dramatic impact on the well-being of the elderly in our society.

Obviously, there is a long way to go. That is apparent from the testimony of the people on the first panel. But there has been a lot of progress in this country.

I think it's important that we keep that in mind when we are judging the effectiveness of the programs we are talking about today and what should be done in the future to know that, at least as a baseline and as a framework, so much has already been done to assist that important segment of our society that makes up our elderly population.

Let me go on and tell you just a little bit about some of the other programs that are specifically designed for the elderly. You are going to have more testimony on that so I am just going to skim over it. It has been touched on already.

Those have to do with the elderly feeding programs, both the congregate feeding programs where the elderly get together and have an opportunity to have a meal which is provided free if they cannot make a donation toward that meal, or in certain cases if they are homebound to have meals brought to them; the meals-on-wheels programs that are administered through other agencies, not USDA.

We are involved in those programs because we received Federal funds from Congress for those programs and then turn them over to State agencies. This last year, USDA gave in contribution for those congregate feeding programs not quite $121 million.

These funds go to support the congregate programs and to hopefully help subsidize the provision of meals to those who are homebound and cannot go out and join the rest of all of you in enjoying the food that is provided.

In addition, in that TEFAP Program that I told you about, the Temporary Emergency Program, we do provide a lot of commodities to households, that are packaged for household use. Most of you know about them as the cheese giveaways. They were instituted in December 1981 by President Reagan and have continued to this date, and they have provided throughout the country, since 1981, literally billions of pounds of food to people who can take it home and use it to help supplement their diets and provide better nutrition for their families.

In addition to cheese, we give flour, rice, butter, nonfat dry milk which is important, honey and cornmeal. I know that just this last year New Mexico received over 7 million pounds of food for distribution to households.

Let me go on and talk about a subject in which I have no expertise whatsoever. So I am going to have to rely a lot on my notes, but it is a very important part of what USDA does.

That has to do with human nutrition research and the elderly. As I said, I have provided for the record more detailed, more technical testimony which you may want to review. Quite honestly, I am going to have to short circuit that a little bit. I cannot pronounce half the words that are in the text so you are just going to have to help me out on this, but let me briefly review for you——

Senator BINGAMAN. Let me interrupt just for a second. We want to hear this, but we are running late, and I am in the difficult situation of having another panel after we finish with this one.

So if you could make it relatively short, I would appreciate it. Thank you.

Ms. CROW. I will be more than delighted, as I said, since I have no expertise in this, to be extremely short.

Senator BINGAMAN. Why don't we take a short break.

[Short recess.]

Ms. CROW. The USDA, through its Agricultural Research Service, supports the largest research unit in the United States devoted exclusively to nutrition and to aging studies

A new 15-story building to house USDA's Human Nutrition Research Center on Aging was completed in 1982, and is located immediately adjacent to Tufts in Boston. The USDA operates this center as a Government-owned contract-operated facility through a contract with Tufts University. It contains a 28-bed metabolic research unit. It is one of the largest in the United States, and it is the largest unit that is devoted exclusively to nutrition and aging studies.

Over 30 scientists and 100 scientific support personnel are housed at the Human Nutrition Research Center on Aging at the present and are doing some very, very valuable work.

The mission of this Center is to examine the relationship of nutrition to the aging process throughout adult life, and to determine the dietary needs of elderly people. The Center's scientists are determining the ways in which diet and nutrition status influence the onset and the progression of aging. They are employing experiments with animals, tissue cultures, and human subjects.

They are looking at three general questions: how does nutrition influence progressive loss of tissue function with aging; what is the role of nutrition in the genesis of major chronic degenerative conditions associated with the aging process, and the ones most of us would know about have to do with bone mineral loss and visual disorders. Lastly, they are focusing on the nutrition requirements necessary to maintain the optimal functional well-being of older people.

As I said, some of the specific research outcomes are listed for you in my written testimony—for those of you who can understand it. If you cannot, I would like you to contact us and we will try to put the information into layman's English for you and see if we can help all of us understand the research goals better because they are so very important to all of us.

I thank you very much, Senator.

[The prepared statement of Ms. Crow follows:]

PREPARED STATEMENT OF SONIA F. CROW

Thank you for your invitation to appear in Albuquerque, Senator Bingaman, to discuss the role played by USDA in contributing to the nutritional well-being of older Americans. I am pleased to be a part of this field hearing and will attempt to describe our efforts in this important field of program activity.

The principal program arm of USDA which provides nutritional services is my agency, the Food and Nutrition Service. It administers thirteen programs providing food and nutrition assistance to populations ranging from pregnant women and infants to school-age children to persons in charitable institutions to reservation Indians to those simply with low incomes. Three of these programs have national significance for the elderly: the Food Stamp Program, the Elderly Feeding Program, and the Temporary Emergency Food Assistance Program.

FOOD STAMPS AND THE ELDERLY

The Food Stamp Program is a nationwide program which helps low-income people purchase more nutritious diets. Assistance is provided in the form of coupons that can be redeemed for food at over 230,000 authorized grocery stores and other out-

lets. The program is administered at the Federal level by the Food and Nutrition Service of the U.S. Department of Agriculture and at the State and local levels by State or county social service departments. These social service departments use federal standards to determine the eligibility and benefit levels of applicants and issue benefits monthly.

Families and individuals may be eligible if their monthly income and resources are low and they meet a limited number of nonfinancial criteria. Benefit levels are based on household size and income available for purchasing food after other expenses are considered. For the period October 1985 through September 1986, an individual living alone may receive up to $80 a month, a two-person household up to $147 a month, and a four-person household up to $268 a month. The program provided about 19.9 million people in 7.3 million households with $10.8 billion in benefits during Fiscal Year 1985. The average monthly benefit was about $45 per person.

The Food Stamp Program contains special provisions to address the needs of the elderly, that is, persons age 60 or over. These provisions include the following:

Net income test.—Households without elderly or disabled persons have their eligibility based on their gross and net incomes and their level of benefits on their net income after the allowable dedutions are subtracted. By contrast, households with elderly or disabled members have both their elibility and level of benefits based on the lower net income amount.

Joint processing.—Elderly persons can apply for food stamps at local social security offices at the time they apply for Supplemental Security Income (SSI) benefits.

Medical deductions.—Households with a member who is 60 or older may deduct all medical expenses that exceed $35 a month for its elderly or disabled persons.

Shelter deductions.—Food stamp rules permit households with elderly or disabled persons to deduct all shelter costs over 50 percent of the household's adjusted income. Households without elderly or disabled persons have limited shelter deductions.

Higher allowable assets.—The Food Stamp Program allows households of two or more persons, one of whom is 60 years of age or older, to have up to $3,000 in assets and remain eligible. All other households are allowed only $1,500.

Dependent care deductions for working adults.—Food stamp households may deduct up to $139 per month for the care of an elderly or disabled persons when such care enables a household member to accept or continue employment, or to participate in training or education preparatory to employment.

Work registration exemption.—The elderly are exempt from the program's work registration as well as the other work requirements, such as Job Search.

Periodic reporting exemption.—Elderly persons who have no earned income and who live alone or with others all of whom are elderly or disabled and have no earned income are not required to file reports under periodic reporting/retrospective accounting systems.

Household definition.—Elderly parents or siblings are exempt from the requirement that parents and children or siblings who live together must be considered as one household for food stamp application purposes. In addition, those elderly persons who live with others of moderate income and who are unable to prepare their own meals because of ill health may be certified separately from those with whom they live.

Congregate dining facilities and home delivery of meals.—USDA may authorize non-profit food service programs to accept food stamps from the elderly and disabled in payment for meals. Such food service programs may include congregate dining facilities and services that deliver meals to homes.

In addition, States may contract with restaurants to offer meals at low or reduced prices to elderly food stamp participants. When approved by USDA, such restaurants may accept food stamps for meals.

Although it is not a special program provision, I should mention that several areas that participated in a special project designed to test the feasibility of providing the elderly with cash in lieu of their food coupon benefit continue to issue checks.

Food Stamp Program eligibility requirements limit participation to the needy and the amount of benefits available increases as the degree of need increases. Specifically, households with elderly members must have spendable income at or below the poverty line. This line is now $438 per month for a one-person household and $588 per month for a two-person household. Spendable income is determined by subtracting allowable expenses (such as high shelter or medical expenses) from cash income. In 1983, about 90% of food stamp households with elderly members had monthly cash incomes below the poverty line. About 99% had monthly cash incomes below 125% of the poverty line.

The size of the food stamp allotment varies according to household size and food purchasing power as measured by net income. Currently, the maximum benefits is $80 for a one-person household and $147 for a two-person household. Maximum benefits are reduced by $30 of net income. That is because a household is expected to use that amount of its own money for its food bills, with food coupons covering the remaining amount. For example, a one-person household with no net income gets $80 a month. If the household's net income increases to $200, the food stamp allotment falls to $20 a month.

What can we say about the characteristics of elderly food stamp recipients? The most detailed information we have is from a 1982 study of Food Stamp Program household characteristics. That study found that households with elderly members accounted for almost 20 percent of the total food stamp caseload in August, 1982, but since they were smaller on average and had relatively higher income, they received less than 8 percent of all benefits issued that month. Over 44 percent of all one-person households were elderly (that is, single elderly persons living alone or certified as a separate food stamp unit within a larger household). Eighty-eight percent of all elderly participants either lived by themselves or with one other person. Nearly 69 percent of all elderly households were headed by women, about 56 percent were single elderly women living alone and 13 percent were living with others.

After adjusting for the differences in household size, households with elderly members had relatively higher income than those without elderly members. Average gross income per person was nearly twice as high among the elderly as all other program participants. Similarly, the average net income per person in elderly households was double that found in other households. Thus, average benefits per person for the elderly were about two-thirds of the average benefits for the non-elderly. A further indication of the higher incomes received by elderly program participants is the fact that 29 percent of elderly households in 1982 received the minimum $10 benefit, compared to 2 percent of the households without elderly persons.

About 88 percent of the elderly households had income from either Social Security or SSI. About 35 percent had income from both. Only 2 percent of elderly households reported the absence of all income. As might be expected, only 6 percent of elderly households reported earned income.

MONITORING FOOD STAMP PROGRAM EFFECTIVENESS

FNS operated two systems to monitor program effectiveness: the quality control (QC) system and the management evaluation (ME) system. These systems serve the purpose of ensuring that the Food Stamp Program operates as the law and regulations specify and that program benefits go to those for whom they are intended.

The QC system is designed to measure the accuracy of payments to households and determine the extent of payment errors. States are required each month to intensively review a random sample of cases to measure payments to ineligible households, overpayments, underpayments, and denials or terminations of eligible households. FNS reviews part of each State's sample to validate error rates. The system assesses how well States are gearing payments to household circumstances. The system produces extensive management information which forms the basis for Federal fiscal sanctions or incentives and for State corrective action plans.

The ME system assesses State administrative operations to ensure that local certification and issuance offices are meeting Federal and State guidelines. States are required to review a sample of their offices each year to ensure that procedural requirements are being met. FNS oversees these State efforts. These reviews assess such areas as application processing, notice to households, and restoration of lost benefits.

ELDERLY FEEDING PROGRAM

Through the Food Distribution Program, USDA donates foods and cash in lieu of foods to help meet the nutritional needs of the elderly. Specifically, this program subsidizes meals through the Elderly Feeding Program of the U.S. Department of Health and Human Services [HHS]. This program was authorized under the Older Americans Act of 1965, as amended, to provide nutritious meals for elderly people. HHS gives grants to State Agencies on Aging, which designate Area Agencies on Aging (AAA) to plan and coordinate the nutrition program through providers of nutrition service at the local level.

These State Agencies on Aging receive cash, donated food, or a combination of both to provide meals to the elderly at various sites. The amount of food or cash that USDA gives each State is based on the number of meals served in the program and the level of assistance per meal authorized by legislation. Total program costs

also are limited by authorizing legislation and appropriations. Initially, USDA support for the program was provided in donated foods. This aided USDA with its price support and surplus removal activities as well as provided direct support for the meals served in the program. However, once legislation authorized cash in lieu of donated foods, the program increasingly became a cash transfer program. In fact, presently less than five percent of USDA meal support is provided in donated foods. The remaining support is in the form of cash. The current authorization for Fiscal Year 1985 is $120.8 million.

These elderly nutrition services are provided in schools, community centers, churches, public housing, and other places accessible to the majority of local elderly people. By statute, the AAA provides nutritious, well-balanced meals at least once a day, 5 or more days a week. The AAA will also provide transportation to and from the sites for those who need it, when possible. Similarly, the AAA will provide home-delivered meals at least once a day, 5 or more days a week, when possible, to older people who are homebound.

Eligibility requires only that a person be 60 years of age or older and their spouses, regardless of age, may participate in the program. In addition, while each provider of nutrition service suggests appropriate contributions, each person decides what he or she is willing to contribute toward the cost of the meal. The meals are free to eligible persons if they do not wish to make a contribution.

I should point out, Senator Bingaman, that the Administration proposed legislation in 1984 to transfer funding of the Elderly Feeding Program from USDA to HHS so that one agency, instead of two, would have responsibility for it.

FOOD DISTRIBUTION FOR THE ELDERLY

Additionally, the USDA offers food assistance to elderly people through the Food Distribution Program for charitable institutions (e.g., soup kitchens and nursing homes). The elderly may also receive available surplus food through the Temporary Emergency Food Assistance Program. These two programs do not restrict any recipient from participating based upon age; economic need is the only requirement.

The Temporary Emergency Food Assistance Program (TEFAP) gives needy Americans, including low-income and unemployed persons, USDA-donated foods for household use. The foods are free but recipients must meet certain minimal eligibility criteria.

A temporary program, TEFAP is authorized by Title II of Public Law 98–8, as amended (the Temporary Emergency Food Assistance Act of 1983). The precursor of TEFAP began in December 1981, when President Reagan initiated the donation of surplus foods directly to needy persons in households through nonprofit organizations and food banks. With implementation of the Food Stamp Program on a nationwide basis, such donations had been discontinued after June 30, 1974.

Food distributed by TEFAP has been declared surplus after certain other commitments have been met by USDA. Items vary from time to time depending on what products are in surplus and other factors. During the lifespan of TEFAP, these have included cheese, butter, nonfat dry milk, corn meal, flour, rice and honey. USDA provides these foods in package sizes that are suitable for household use.

In each State, USDA enters into agreements with the agency responsible for administering the program. The State agency selects public or nonprofit emergency feeding organizations such as food banks and delivers the foods to them. These organizations then distribute the food to needy persons.

Besides buying the food, processing and packaging it, and shipping it to the States, USDA also provides funds to State agencies to help defray costs incurred by them or by local organizations. These funds may be used to store and distribute the food. At least 20 percent of these funds must be reserved for use by the local feeding organizations to help meet their costs in giving the food to needy persons.

USDA currently makes the following commodities available on a monthly basis to States for household distribution:

Cheese, 35 million pounds; flour, 10 million pounds; rice, 10 million pounds; butter, 6 million pounds; nonfat dry milk, 7 million pounds; honey, 6 million pounds; and corn meal, 3 million pounds.

During Fiscal Year 1985, USDA made a total of over 934 million pounds of surplus foods available to States for distribution to needy households. New Mexico received 7,049,372 pounds of food at a total cost of $7,363,980. Since the beginning of TEFAP, New Mexico has received 21,773,988 pounds of food at a cost of $25,259,791. For the entire U.S., the amount of surplus food and its value since TEFAP began is 2,629,365,380 pounds at a cost of $3,132,604,057.

In many cases, information about distribution and eligibility can be found in local newpapers or over the radio. The day-to-day program operations are administered by the State agency and local organizations.

HUMAN NUTRITION RESEARCH AND THE ELDERLY

Your letter of invitation, Senator Bingaman, also expressed interest in USDA Human Nutrition Research Programs, especially as they apply to the elderly. While nutrition research is beyond my sphere of expertise, I can report several developments to you thanks to information generously supplied by other USDA agencies.

USDA, through its Agricultural Research Service (ARS) supports the largest research unit in the U.S. devoted exclusively to nutrition and aging studies.

The Agriculture Appropriations Bill of 1978 instructed the Department of Agriculture to establish an "adult human nutrition research facility at Tufts University in Massachusetts." A new 15-story building to house USDA's Human Nutrition Research Center on Aging was completed in 1982. The building provides 200,000 square feet of space and is located adjacent to the Health Sciences Campus of Tufts University and the New England Medical Center in downtown Boston. The USDA operates this Center as a Government-Owned, Contract-Operated facility, through a contract with Tufts University. The Center contains a 28-bed Metabolic Research Unit, which is one of the largest in the U.S., and certainly the largest unit devoted exclusively to nutrition and aging studies. Over 30 scientists and 100 scientific support personnel are housed in the Human Nutrition Research Center on Aging at present.

The mission of the Human Nutrition Research Center on Aging is to examine the relationship of nutrition to the aging process throughout adult life and to determine the dietary needs of elderly people. Center scientists are determining the ways in which diet and nutrition status influence the onset and progression of aging—employing experimental animals, tissue cultures, and human subjects for such studies. They are exploring ways in which diet, alone and in association with other factors, can delay or prevent the onset of degenerative conditions commonly associated with the aging process. The research will determine nutrient requirements during aging and the ways in which an optimal diet, in combination with other factors, may provide health and vigor over the life span of humans.

Scientists at the Center are addressing three general questions:

How does nutrition influence progressive loss of tissue function with aging?

What is the role of nutrition in the genesis of major chronic degenerative conditions associated with the aging process such as bone mineral loss and visual disorders?

What are the nutrient requirements necessary to maintain the optimal functional well-being of older people?

The research areas being investigated at the Center include the following:

Nutrition and Aging in Skin-Derived Cells; Relation between Functional Capacity, Body Composition and Nutrient Needs; Role of Nutrition and Free Radical Reactions in Age and Drug Associated Changes; Role of Micro-nutrients on Neuropsychological Functions Throughout the Life Cycle; Lipoproteins, Nutrition and Aging; Nutrition, Aging and Cardiovascular Metabolism and Function; Role of Nutritional Factors in Preventing Age-Related Loss of Bone Density; Effects of Nutrition and Aging on Lens Proteins and Proteases; Nutrition Epidemiology and Aging; Micro-Nutrient Requirements of the Elderly; Macro-Nutrient Requirements of the Elderly; and Bioavailability of Nutrients in the Elderly.

I am submitting examples of recent research findings, briefly described in technical language, for the record.

NUTRITION INFORMATION AND ASSISTANCE FOR THE ELDERLY

There are a number of USDA-sponsored activities which provide nutrition-related information and assistance to the elderly, and I will briefly describe some of them.

A major initiative at the Food and Nutrition Service has been "Make Your Food Dollars Count", a nutrition information project for low-income consumers. This project provides information through State extension offices, State departments of health and welfare, and State food stamp offices which is useful for low-income elderly households. "Make Your Food Dollars Count" was officially introduced at USDA's Food and Fitness Fair in August, 1984, and at a series of regional workshops around the country.

The project is designed to help low-income families, particularly food stamp users, buy and prepare more nutritious and less expensive foods. Work began on the project in November, 1983, when a U.S. Department of Agriculture Nutrition Educa-

tion Task Force was formed to identify the skills and nutrition information needed by low-income individuals to enable them to get the most food and nutrition for every dollar spent.

A variety of materials has been developed. Pamphlets on shopping skills and nutrition are available through State and local food stamp offices on such topics as: comparing food brands; buying convenience foods compared with preparing them at home; shopping with unit prices; understanding food labels; eating a variety of foods; choosing nutritious snacks; finding the best meat buys; and planning ahead to make your food dollars count.

Posters, radio public service announcements, newspaper reproducibles, messages on the food stamp coupon booklet, workshops, and a slide/cassette tape presentation are also being used to get the nutrition message directly to food stamp users and other low-income consumers. At the introductory workshops, USDA Extension Service agents, personnel from State departments of health and welfare, nutritionists, dietitians, and staff from food stamp offices learned about the nutrition information project. They are now using the project materials in their work with low-income households.

The pamphlets are free to food stamp users, State and local food stamp offices, Extension EFNEP offices and others working with food stamp users. All others pay modest fees and order the pamphlets from the Superintendent of Documents.

The Government Printing Office (GPO) is making the pamphlets available to all interested consumers, regardless of income. The pamphlets are available in sets of four at $2.00 per set. Two compatible brightly colored posters, 17" x 22", are available for $3.50 each. One says, "Buy Better" and the other, "Eat Better."

Another arm of USDA, the Extension Service plays a significant role in promoting nutrition education and good health for the elderly. Its programs are conducted to help older people live independently and have a choice of lifestyle and living arrangements. There is variation from State to State. Several examples of activity from selected States follow:

NEW MEXICO

Programs designed to increase the quality of health, longevity and safety in one-half of the State's counties, reached more than 1,781 adults and 940 children through 264 volunteers in 25 program events.

Five counties reported multi-agency Health Fairs, one of which was specifically a "Senior Citizen Health Fair". Health Fairs help identify agencies and services for the elderly and provide inexpensive screening procedures including height/weight relationships, blood pressure, hearing tests, vision tests, glaucoma check, and dental exams. Blood samples were taken for tests to determine risks for diabetes, anemia, high levels of cholesterol, blood sugar, and triglicerides.

Use of computer technology in Cooperative Extension Service offices also facilitates services to seniors. All County Extension Home Economists have been trained and have available a Computerized Nutrition Analysis program that can be used on a one-to-one basis with seniors and provide recommendations for improving nutrition. This program has also been utilized to analyze menus at Senior Nutrition Sites and provide recommendations for improvement. Another county used a computerized "Lifestyle Awareness" program and provided all program participants with an analysis of habits and ways to improve longevity.

Other county program examples include training Senior Companion Volunteers on nutrition and health for the elderly, programs at county Senior Centers on "Keep Moving to Stay Healthy", special newsletters on health, features in regular county newletters on diet, health and fitness, and using Dairy Council representatives for public programs on osteoporosis.

PENNSYLVANIA

Twenty-two nutrition peer-educators were recruited from seven counties by the county home economists and Area Agency on Aging staff members. They were trained to teach lessons on the "Fat-Controlled Diet," "Shopping For Nutritious Bargains" and "Sodium in Foods." The peer-educators conducted 95 education sessions for 933 elderly persons. The methodology and program resources were shared with many Area Agencies on Aging and Extension leaders across the Nation.

GEORGIA

Extension State staff members have enlisted the assistance of hospital and Public Health Department nurses in conducting training for Caregivers for Dependent

Adults. Included in the training are segments on "Nutrition," "Infection Control and Hygiene" and "Communicating With Family Members." Some Caregivers are providing respite for a family member, some are employed, and others are providing care for a family member.

PENNSYLVANIA AND OKLAHOMA

Senior citizens receive a bi-monthly newsletter from the State Extension office providing health and nutrition information.

ALABAMA

Twelve area meetings were held to present the latest information on arthritis including proper treatment such as diet, exercise and medicines. Recognizing quackery and early warning signs were emphasized and the 2,000 participants indicated that new knowledge was gained.

RHODE ISLAND

Extension Specialist developed/prepared five 2½ minute public service announcement [PSA's] for 15 radio stations' broadcasts giving information on wise eating and exercises to delay and prevent osteoporosis.

The CES nutritionists and an exercise therapist conducted diet and exercise sessions for 175 adults at 30 meal sites in Providence. They also presented similar programs for AARP and "Leisure and Learning" groups.

For your information, I have provided you and your staff with copies of various USDA and State Extension Service publications which are used with elderly populations.

That completes my formal remarks, Senator Bingaman. I will be happy to respond to questions.

Senator BINGAMAN. Thank you very much also. Mr. Dickey, did you have some comments you want to make?

Mr. DICKEY. No, I do not, Senator. Thank you.

Senator BINGAMAN. All right.

Our next witness then is Dr. Evan Hadley who is the Chief of the Geriatrics Branch of the National Institute on Aging, Department of Health and Human Services in Maryland.

And, doctor, we are pleased to have you here in Albuquerque, and look forward to your testimony.

STATEMENT OF EVAN HADLEY, M.D., CHIEF, GERIATRICS BRANCH, NATIONAL INSTITUTE ON AGING, HHS, ROCKVILLE, MD

Dr. HADLEY. Thank you for the opportunity to speak on this very important topic. I will summarize my statement. Since NIA's research on nutrition is aimed at ways people can improve their own nutrition, it's useful to discuss it in terms of some practical questions about nutrition and aging. There are many questions about the best diet for people to maintain good health. Currently people have become especially aware of the connection between diet and prevention of osteoporosis. As you know, osteoporosis is a disease which causes loss of bone strength and is mainly a disease of the elderly. Because osteoporosis predisposes to hip fracture, it's a major cause of death and disability among the elderly. Over 200,000 people in the United States suffer a hip fracture each year and at least 20 percent die from complications of the fracture and another 20 percent remain unable to walk. The disability from hip fracture is expensive too—the annual costs resulting from hip fracture are over $7 billion.

We have made some progress with nutritional approaches to preventing osteoporosis. There is more and more evidence that the

current recommended dietary allowance for calcium of 800 milligrams per day is probably too low for preventing osteoporosis in women. Recently an NIH panel recommended intakes of 1,000–1,500 milligrams a day. We still need to know more about calcium needs of the elderly who often have impaired calcium absorption and do not absorb it that well through the digestive tract.

We also need to know a lot more about vitamin D needs of the elderly.

There is good reason to believe that the elderly may need higher levels of vitamin D. On the more positive side, I think there is beginning to be some evidence that osteoporosis can be treated or at least its progress slowed or arrested by calcium and vitamin D supplementation. We still need to know a lot more, but it is a hopeful sign.

Another strategy being pursued at the National Institute on Aging in terms of nutrition and aging is to try to prevent diseases of late life through good nutrition throughout the life span, in addition to treating them once they have already developed late in life.

I think a heartening example of this kind of approach is the decline in recent years in circulating levels of cholesterol which, as you know, is a major risk factor for heart disease. One of the interesting things researchers have found out is that changes in the dietary factors that are known to effect cholesterol, only explain a relatively small amount of the drop in cholesterol, which suggests that there may be other dietary factors that we do not yet understand that effect cholesterol.

If we could find out what they are, we might be able to get cholesterol levels down still further. I think this kind of nutritional approach—looking for dietary factors over the lifespan that can be helpful in preventing diseases in late life—is a very important priority, both at NIA and other institutes at the National Institutes of Health.

Another broad area of questions about nutrition and aging centers on the issue of whether or not older people are getting nutritionally adequate diets. I think this issue can be looked at in a lot of ways.

Maybe the most straightforward way is: Are people at least getting the recommended dietary allowance for various nutrients? As has been said before, there is a fair amount of evidence that even healthy people living at home are not getting the recommended dietary allowances of many nutrients, including vitamin B_6, vitamin D and calcium, and several others.

But I think an even more basic question is: How much of various nutrients is enough for older persons, and do these requirements change with age?

To answer that question, we really need fairly long-term studies, in many cases, of the effect of different levels of various nutrients in the body. For example, we are supporting a study comparing different levels of zinc intake in older persons to see if higher levels of zinc can improve immune function or resistance to disease, as has been suggested by some earlier studies.

Another reason that requirements for nutrients may change with age is, as Dr. Blumberg has already mentioned, absorption and regulation by the body of nutrients' changes with age. These

changes may play a role in contributing to, for example, vitamin B_{12} deficiency in a small but significant percentage of older people.

Vitamin B_{12} deficiency is particularly important because, in certain cases, it can lead to neurologic disorders, including dementia. Now, the number of cases of dementia that are related to vitamin B_{12} deficiency is uncertain, and it is probably only a small percentage of dementia cases, but I think it is particularly important to learn more about this because vitamin B_{12} deficiency is a potentially treatable cause of dementia in persons who might otherwise be assumed to have Alzheimer's disease.

Because nutritional needs may change with age, it may be that we need to adjust the recommended dietary allowances for many nutrients to take into account these changes. As we said, to do this will take long-term studies. NIH has begun discussions with the National Academy of Sciences, which issues the RDA's, to plan research for how this can be done.

Finally, I want to also recognize the point that the elderly are a very mixed group--that there are obvious differences between people in their sixties and people in their eighties—and we need to know much more about the nutritional needs of the oldest old. It is the fastest growing segment of the population and the most at risk for disease.

I think it is also important to realize that we could learn a lot about nutrition in a positive way from the oldest old. I think that people who survive to a healthy old age may do so in large part because of their diet.

If we could compare the diets of people who survived to healthy old age with those who have not fared so well, we might learn a lot about ways to assure good health well into late life.

Because this is such an important topic, NIA has begun a program specifically focused on research on the oldest old. This is not confined to nutrition, but nutrition is a major part of our interest in that area.

I want to say one thing about the scope of our efforts in nutrition and aging. It is a priority with us, and we are somewhat frustrated in the many questions that we still need to answer about nutrition and aging.

I think that one of the problems has been that there has really been a lack of well-trained researchers who are working in aging and nutrition. At NIA, we have begun a program to try to train and develop these kinds of researchers so that we can get answers to these questions.

In my written testimony, I have also included a description of NIA's public education programs in nutrition and other Public Health Service programs in nutrition education.

I would be glad to answer any questions that you have.

Senator BINGAMAN. Thank you very much. We appreciate it.

[The prepared statement of Dr. Hadley follows:]

PREPARED STATEMENT OF EVAN C. HADLEY, M.D.

Mr. Chairman and members of the Committee, I am Dr. Evan Hadley, Chief of the Geriatrics Branch at the National Institute on Aging [NIA]. Thank you for the opportunity to present information about nutrition and aging and on NIA and other departmental activities related to this issue.

RESEARCH ON NUTRITION AND AGING: RECENT FINDINGS AND FUTURE NEEDS

The National Institutes of Health [NIH] is the major agency in the Federal Government that supports research and training in nutrition as it relates to health maintenance, human development throughout the life cycle, disease prevention and disease treatment. This research is supported by all 11 NIH Institutes, and other NIH components.

The National Institute on Aging's nutrition program supports research on the role of nutrition in preventing or treating medical problems of late life. Since this research is ultimately focused on ways in which people can improve their nutrition, it is useful to discuss it in terms of some practical questions about aging and nutrition.

The most commonly asked questions concern the optimal intake of specific nutrients and total calories for maintaining good health in older persons. A few examples illustrate our knowledge and needs for research:

A topic of great current interest is the role of nutrition in preventing osteoporosis, which is mainly a disease of the elderly. The great majority of elderly women and many elderly men suffer from osteoporosis, which is a major cause of the over 200,000 hip fractures occurring annually in this U.S. Hip fracture is a major cause of death and disability among the elderly and results in costs of over $7 billion per year.

Calcium, vitamin D, and probably other nutrients are important in protecting against osteoporosis. We have come to realize that the present Recommended Dietary Allowance for calcium is probably too low for most women, especially after menopause when they are most at risk for this disease. Recently an NIH panel recommended calcium intakes ranging from 1000 to 1500 milligrams per day for prevention of osteoporosis in women. However, we still need to know more on this point, especially about the optimal amount of calcium in the diet of the elderly, who tend to absorb it less well from the digestive tract. Research supported by NIA at the University of Washington suggests that calcium and vitamin D supplements may be helpful in some older persons who have already developed osteoporosis.

The optimum number of calories to consume is an important issue for all age groups. Currently, the recommended energy intake for persons declines as they get older, because energy expenditure tends to decrease with age. However, these recommendations need to be reconsidered in the light of evidence that moderate exercise is useful in preventing or treating diabetes, osteoporosis, and possibly other problems in the elderly. If increased exercise is indeed helpful, we may need to adjust the recommended intake of calories upward for those elderly who are able to engage in moderate or vigorous exercise. In view of the fact that obesity is a known risk factor for many diseases, this issue is very important and needs very careful study before any firm conclusions can be drawn.

It is also worth noting that we need to consider nutrition over the entire lifespan, not just for the elderly, when thinking about preventing diseases of old age. For many diseases of the elderly, prevention through good nutrition earlier in life is more effective than trying to remedy advanced disease later. This should be reflected in recommended nutrient intakes for all ages.

The significant drop in circulating cholesterol levels in recent years illustrates how risk factors for diseases of later life can be changed. NIA researchers have found that the nutritional factors presently known to affect cholesterol levels, such as body weight and fat intake, account for only a small part of the recent decline. This suggests that other dietary factors, as yet unknown, may help to reduce cholesterol levels. Identifying such factors in the diet of the young and middle-aged which can protect against diseases of later life is an important research priority at NIA and other NIH Institutes.

A second major question is whether the elderly are consuming nutritionally adequate diets. Because the elderly tend to eat less than younger persons, they run a special risk of not consuming enough of specific vitamins and minerals. NIA-supported studies at the University of New Mexico suggest that many elderly persons living at home may have inadequate intakes of vitamins B_6, D, E, and folic acid. As noted above, calcium intakes of many older persons may also be inadequate.

Often we are hampered in deciding whether or not a certain daily intake of a nutrient is adequate for older persons because we do not know the long-term effects of various dietary levels. This is a pressing area for research on such factors as zinc, vitamin D and many others. NIA is supporting a study by researchers in New Jersey to determine the effect of various levels of zinc in the diet of older persons on immune function and protection from infections. Changes with age in the absorption and regulation of nutrients in the body may also affect nutritional require-

ments. Such changes may contribute to the presence of vitamin B_{12} deficiency in a small but significant percentage of the elderly. This is particularly noteworthy since this deficiency may contribute to neurologic problems, including dementia in some cases. Though the frequency of vitamin B_{12} deficiency as a contributor to dementia is not clear, it is important to investigate this possibility, since it is a potentially treatable cause of this devastating disability in persons who might otherwise be assumed to have Alzheimer's disease.

Because of the above considerations, the Recommended Dietary Allowances [RDA's] for various nutrients may need to be adjusted further for the elderly. For many nutrients, the information to determine this has not yet been obtained, and will require intensive long-term research. The NIA has been collaborating with the National Academy of Sciences in planning a comprehensive approach to evaluating the RDA's for the elderly.

It is important to recognize that the elderly are a very diverse group. It is highly likely that nutritional requirements may change considerably between the ages of 65 and 85. We need to know much more about the nutritional needs of the population over 85 years of age, the fastest growing segment of the elderly who are most at risk of disease. We should also remember that there may be much to learn from the very elderly about nutrition in a positive way. It is quite likely that persons who live to a healthy advanced age do so in part because of their diet. By comparing the diets of these healthy elderly with those who have not fared so well, we may learn much about the optimal nutrition for a long and healthy life. For all the above reasons, NIA has introduced a program of research specifically focused on the population aged over 85.

Though the field of nutrition and aging is a priority, it presently accounts for a modest share of NIH nutrition research: In FY 1984, NIH research on nutrition and the elderly amounted to $7.8 million, of which $4.8 million was supported by NIA. This was 4 percent of the total NIH nutrition expenditures of $193 million. One major problem is the lack of trained researchers in the field of nutrition and aging. NIA has begun a program to develop high-quality researchers who can begin to answer the many important questions that remain about nutrition and aging.

PUBLIC HEALTH SERVICE NUTRITION EDUCATION PROGRAMS

Nutrition education is carried out on a continuing basis as part of the NIA's public information program. The objectives of the program are to inform elderly people, their families, health care workers, agencies concerned with aging, the press, and other about the nutritional needs of older people and research findings in the field of nutrition and aging. The NIA Public Information Office prepares and distributed general fact sheets on nutrition (see attached), including four Age Pages—widely distributes, simply written, one-page fact sheets that deal directly with nutrition. Seven hundred fifty thousand copies of each nutritional Age Page were originally distributed. These Age Pages have also been translated into Spanish through a joint effort by the Public Information Office and the National Association of Spanish Speaking Elderly.

The Public Information Office also prepares news releases and summaries of research projects, and responds to telephone and letter inquiries from the public and professionals working in the field of aging. The large number of public, professional, and press requests related to nutrition basically fall into ten categories: calcium/osteoporosis, special needs of the elderly (particularly those in nursing homes), fiber, Recommended Daily Allowances, sugar, proper fluid intake, vitamins, lengthening of life through diet, diet and heart disease, and shopping on low budgets.

NIA has been active in disseminating information on the nutrition-related problem of osteoporosis. In response to the requests for information on the treatment and prevention of osteoporosis, the NIA prepared an Age Page entitled "Osteoporosis: The Bone Thinner." Over one million copies of this Age Page was distributed in bulk quantities. Many small town newspapers and senior citizen organizations picked up this material and made it available to their readers. A revision of the osteoporosis Age Page reflected a more aggressive approach to the prevention and treatment of the disease. This new publication was part of a cooperative effort between the American Association of Retired Person [AARP] and the NIA. AARP has made this Age Page, as well as more lengthy literature on the subject, available to its extensive membership. Material on osteoporosis is also included in the 750,000 copies of "Help Yourself to Good Health," a joint educational effort by the Institute and Pfizer Pharmaceuticals.

To coincide with the Department of Health and Human Services' strategy for improving and enhancing the health and well-being of older citizens, and interagency

effort involving the NIA, the Administration on Aging, the Office of Disease Prevention and Health Promotion, the Health Care Financing Administration [HCFA], and other agencies has led to the distribution of publication on nutrition.

In 1984, DHHS also launched Healthy Older People, a two-year national public education program designed to encourage older Americans to adopt healthy lifestyles that can reduce the risks of illness and help them lead more active lives. Sponsored by the Office of Disease Prevention and Health Promotion of the U.S. Public Health Service, the program is providing broadcast and print materials to the States and interested national organizations on the topics of exercise, nutrition, safe use of medicines, smoking cessation, injury control, and preventive health services.

The program is now in its second year of operation. Every State is now participating in Healthy Older People; television public service announcements [PSA's] urging older Americans to adopt healthy habits have been distributed to all State contacts and national television networks; regional training has been conducted in ten locations to encourage State and local organizations to join in Healthy Older People, and to give them skills in working with the media and creating ongoing health promotion programs. Approximately 500 people attended these sessions, representing State and local government agencies, voluntary organizations, universities and hospitals.

Other crucial groups in promotion of the health of older Americans are the national voluntary organizations. AARP has produced television public service announcements and trained AARP health advocates on health promotion issues. The American Hospital Association is sponsoring a nationwide teleconference to inform professionals in health and social service organizations about the issue and the National Council on Aging keeps its numerous groups serving older people informed about the program.

The Public Health Service is now working with several other national groups which have expressed interest in distributing Healthy Older People materials and conducting health promotion programs. In addition, a private sector support plan has been developed to request the involvement of corporations and other groups in Healthy Older People.

Additional program materials for States and organizations will be completed in January, and will include radio public service announcements; television and radio news segments and producers' guides; press packets, skill sheets and posters for consumers, and a how-to-participate guide.

Materials and programs on health promotion for older Americans are receiving increasing attention in the State and local communities. The goal now is to continue to stimulate those efforts through the provision of technical assistance via the Healthy Older People hotline, bimonthly program memos and on-site visits.

Also, the Food and Drug Administration [FDA] engages in a broad array of activities to foster consumer awareness of nutrition-related issues. These activities include consumer education programs, surveys to determine consumer needs and interest, publications, news releases, coordination of conferences, active participation in national initiatives such as the Surgeon General's Report on Diet, Nutrition and Health (due to be released late in 1986), Nutrition Education Task Force, Nutrition Objectives for the Nation in 1990, and the recently published Dietary Guidelines for Americans, in addition to the Agency's regulatory responsibilitics. For an overview of these activities and programs, there is attached an addendum to the testimony which provides a detailed description of FDA efforts.

This concludes my prepared statement, Mr. Chairman. I will be pleased to answer any questions you may have.

Our final panelist here is Wynona Town, who is going to answer questions but does not want to give an initial statement. Is that right?

Ms. TOWN. Yes; I think because of the time limit.

Senator BINGAMAN. OK. That is fine.

Let me just ask a couple of questions of the panel and then Dr. Blumberg probably will have some questions also.

Rita, could I ask you, is there any consistent State policy at the mealsites that the State oversees to try to encourage or require any kind of exercise program in connection with the providing of meals?

Ms. MAES. There is no State policy requiring this. However, through development of our programs at the local level and with the area agencies on aging and the State agency, there is a strong effort in terms of health promotion for New Mexico coordinating this with New Mexico State University in developing some exercise programs at our senior centers.

Senator BINGAMAN. But you say there are exercise programs promoted at the senior centers as a normal thing at the present time or not?

Ms. MAES. Yes, there is a very strong emphasis in health promotion in exercise among the seniors at the local level. It is not a State policy, but we do encourage it, from the State perspective, to have exercise programs at the senior centers.

Senator BINGAMAN. Let me ask Sonia Crow, if I could, about this H.R. 2453 that I was urged by Rita to support. What is your position on that?

Ms. CROW. You are going to have to identify other than by number, Senator, or I am not going to know it. Sorry about that.

Senator BINGAMAN. That is the one which would take away the Secretary of Agriculture's discretion to lower the per-meal amount that USDA contributes.

Do you have a position on that? What is the administration's position on that?

Ms. CROW. Well, I don't know if the administration has taken a position on that specific legislation. The way the program works now is that the Secretary of Agriculture is prohibited, by law, from spending more than the amount that Congress has appropriated for that program, which is approximately $120.8 million for this past year.

Given that maximum available amount of money, then the amount and the rate of reimbursement per meal must change according to the number of people that receive meals during the course of a year, which of course is within the control of the various State and local agencies when they have people come forward to join them in the congregate feeding.

We will not know, in fact, until next month how many meals have actually been served in the past fiscal year for 1985 because the Government works on a fiscal year cycle, not on a calendar year cycle. Depending on the number of meals, we will know the exact reimbursement rate that is available.

That is the way the law is right now. So the Secretary, basically, has no discretion to set the rate. He has to abide within the amount of money that Congress has appropriated for the program, and we have hit that maximum ceiling.

Senator BINGAMAN. As I understand the issue that is presented in Congress it is whether or not we should set a particular level for the cents-per-meal that will be provided.

Ms. CROW. Whether there should be just a flat cents-per-meal rate rather than a certain amount appropriated?

Senator BINGAMAN. Yes.

Ms. CROW. I don't know if the administration has taken a specific position on that point. Just strictly speaking for myself, it seems to put the issue sort of backward.

You have a certain amount of limited fiscal resources. I think we are all very well aware that we are facing a massive deficit. There is a certain amount of money that is given to this program, and then it is just a question of how many people will take advantage of the meals and how many people actually make donations toward those meals.

Those meals are available to everyone. You can be the wealthiest person in town and if you want to go down and have a meal you can do that. Nobody asks you. But if you want to give a donation for it, that donation is obviously more than welcomed by the people who run those programs.

So I think you have to keep that in mind.

Senator BINGAMAN. Let me ask, also on the same thing, is there any effort at education in nutrition as part of the Food Stamp Program?

Ms. CROW. Well, I think that is a really important issue that was commented on by a number of people on the first panel: by Ms. Reynolds and others who commented on the fact that it is important to know what you are doing.

If you are going to get food stamps and you are going to take them to the grocery store, you ought to know what it is that you need and how to shop smartly. Nutrition education, of course, is always an ongoing effort everywhere, at all levels of Government.

But since 1984 the Department of Agriculture and my agency, in particular, have placed a special emphasis on nutrition education for consumers, particularly those within the food stamp population. We have developed an array of pamphlets that are actually in easy-to-read English.

They are very useful to me personally. They are designed to remind people to read labels; they are designed to tell you what kind of food to buy—maybe generic brands, you know store brands, instead of the high-priced brands so you will make your dollars go farther and get exactly the same nutritional bang for your buck.

Mr. Dickey was smart enough to bring what I think are pretty snazzy pictures that we post around just to remind people that the smart consumer is an educated consumer. These types of materials are available free, Senator, to people who are food stamp recipients to assist them, and to others who wish to receive them from the U.S. Department of Agriculture. There is just a very modest printing fee that you will be charged.

Senator BINGAMAN. The ones that you had there as examples seemed to concentrate on how you get more for your dollar.

Ms. CROW. Yes.

Senator BINGAMAN. Are there also educational materials that try to inform you on what foods are good for you and what foods aren't?

Ms. CROW. Well, within the material there is stress, for example, on eating a variety of foods. What we find out is that there are an awful lot of people in the food stamp population—which is a reflection of the way all of us eat—who probably eat too much in the way of meat instead of using a variety of protein sources, such as fish and poultry, to supplement their diet rather than spending all of their money on the red meat category.

I think people are becoming increasingly aware of the importance of balance. Meat is a very important protein contributor in your diet, but you don't want to focus on it exclusively. You want to spread it around a little bit.

These pamphlets are designed to give you that kind of consumer education.

Senator BINGAMAN. Do they give you more than just say, eat a variety? I mean, do they actually indicate you should eat more fruits or vegetables, those types of things?

Ms. CROW. Yes, they basically tell you exactly that. Right.

Senator BINGAMAN. OK.

Did you have something?

Mr. DICKEY. Yes, if I could spinoff on the point that Ms. Crow made, in New Mexico during this past year this array of material has found its way into the local certification offices in all the certification project areas.

We are also working with the State Department of Human Services now to attempt to put together, as a part of their ongoing Food Stamp Program, a nutrition education dimension of that program, which is authorized now—has been for sometime.

Not many States have taken advantage of that. It would be a 50–50 match just like the regular administration of the Food Stamp Program. This State has noted they are very interested in that and we are pursuing that with them.

Senator BINGAMAN. OK.

Let me ask Dr. Hadley, if I could, based on your comments about evidence that seniors do not get enough vitamin D and some other of those things, we had a hearing last year on the general question of health promotion as it affects the elderly. Some of the testimony there was from Dr. Goodwin, who is the associate professor of medicine and chief of the division of Gerontology at our University of New Mexico School of Medicine.

He said based on the studies that they have been doing here he thought it was advisable for people over the age of 65 to take a one-a-day vitamin. Later in the conversation, when I was asking him about it, I asked if that was an appropriate thing to be provided as part of this meal program; he seemed to think it was.

What is your reaction to that? Do we know enough at the present time about vitamin deficiencies among senior citizens that it would be advisable to have that as a normal part of a mealsite program?

I would ask Dr. Blumberg the same question or any of the rest of you.

Dr. HADLEY. If I might, I would like to break the question into two parts. One is on the issue of vitamin supplementation in general.

The widespread presence of deficiencies in the diet of older people of various nutrients has led me to think that it may be prudent—certainly not imprudent—to take a multiple vitamin supplement of approximately the RDA for various nutrients. That should be distinguished from megavitamin supplementation, which is risky and not advisable.

I think the issue of adding vitamin supplements to nutritional programs involves other things besides the nutritional requirements.

I think the Department would be glad to provide an answer, but I think that would involve the Administration on Aging and other providers; and we would be happy to provide it to you. I don't think I am personally qualified to make a comment on that.

Senator BINGAMAN. Doctor, did you have a comment on that or would you rather come back to it?

Dr. BLUMBERG. I think I will come back to that.

Senator BINGAMAN. OK. Let me just ask one other question of Wynona Town of the Indian Health Service. Part of the testimony, also, from that earlier hearing last year was to the effect that we have a great deficiency in the number of Indian people in this country who are trained as dietitians or involved in these kinds of issues.

I think Larry Curley, who testified there, said that he was not aware of a single Indian person in this country who was trained or registered as a dietitian. Now, I don't know, that may be an overstatement.

Perhaps you could give me your view as to the extent to which we have a major deficiency in training people in this area in our Indian community.

STATEMENT OF WYNONA TOWN, SANTA FE, NM, CHIEF, NUTRITION AND DIETETICS PROGRAM, INDIAN HEALTH SERVICE

Ms. TOWN. Well, basically he never has met me. [Laughter.]

Senator BINGAMAN. You have never met Larry Curley?

Ms. TOWN. No.

Senator BINGAMAN. You need to get out and meet him. He is in Laguna Pueblo.

Ms. TOWN. I am a registered dietitian and I have a masters in public health nutrition, and I am a Yakima Tribal Member from the Northwest, Washington State, and I also am Choctaw.

The Chief of the Indian Health Service Nutrition Dietetics Branch is also an Indian person, has a Ph.D., and is a registered dietitian.

We are working very hard on including more qualified people in Indian Health Service. We continually look for Indian people who are working on their degrees in dietetics and encourage them and promote them. The numbers are increasing all the time.

The Indian Health Service works very hard to recruit Indian dietitians and nutritionists. There are not as many as we would like to see, but we are aware of the need. The area nutritionist at the Portland area office is also an Indian person, and has a Ph.D. The two people I mentioned, I know very well.

Senator BINGAMAN. We need you to get together with Larry Curley here and discuss what he thinks the deficiencies are.

To what extent does the Indian Health Service, based on your experience, have an outreach program to try to provide any kind of nutritional education to the Indian community that do not wind up in your hospital or some facility that IHS has? Is there an effort to

get out in the communities and really educate people on their needs in this area?

Ms. TOWN. That is the primary effort of the public health nutritionists that are located at the service units.

If I might give you some information on New Mexico. All tribes of New Mexico are served by the Albuquerque area office. There are some Navajo tribes that are also in New Mexico and they are served by the Navajo area office. The area offices are regional.

Within the area office regions there are local service units. New Mexico has five. The Navajo area in New Mexico has three hospitals, which also serve as service units.

The Albuquerque area includes tribes in New Mexico and Colorado. There are 26 tribes total; 19 of those are Pueblo. There are also three Navajo communities and two Apache communities, and then there is also a tribe of Ute people in Colorado.

The people are served by the service units. In the Albuquerque area, we are lucky enough to have dietitians and nutritionists in nearly all of the service units. There are seven public health nutritionists, there are six dietitians. Two positions are in the process of being filled. We don't have individuals in those positions at this point.

There also is the capability to contract with nutritionists or dietitians to serve some programs, but this limits service somewhat because, whenever you contract you may not have a full-time person there all the time, but it is a nutrition resource.

There are also some individuals who are employed by Indian Health Service that work with tribal members. These persons are, many times, members of the tribe themselves and are called nutrition technicians. They are not registered dietitians, but may be recognized by the American Dietetic Association and they are trained many times by the nutritionist.

The nutrition technicians assist in doing some of the education of patients and clients, and do programs in the communities.

The Indian Health Service is a unique organization in that we do a lot of direct service in nutrition. If I could, I would like to describe some of the activities that we do.

Senator BINGAMAN. Why don't you for just a minute. Then Dr. Blumberg, I am sure, has some questions, too.

Ms. TOWN. OK.

Senator BINGAMAN. But go ahead if you would like.

Ms. TOWN. In looking at the services that are provided, nutritionists provide services directly to patients in the hospital. Dietitians usually counsel inpatients and see the people who come to the hospital as outpatients, they are not in a hospital bed, but they come to the hospital for care.

A person can get counseling in that way, but also the nutritionists do consultation with a lot of the programs in the communities, like home health care, the title VI programs and the senior meals. The size and number of programs will vary according to the number of people in the community.

Some service units may have 6,000 people and another service unit may not have that many people. So one nutritionist may be serving more people and may be more spread out. So the amount of

attention that the elderly person gets depends on a number of other factors.

But the nutrition consultation is available through the training of the Indian program staff. In the elderly Indian population, considering the extended family situation, sometimes an elderly person can get nutrition information because they show up at other programs. They may be receiving commodities where a demonstration is going on and a nutritionist or a nutrition technician is providing information.

Or they may be a daily caregiver for a WIC Program participant, a child, and may come in and receive information about the nutrition for that child. Now, the education may not be on nutrition for the elderly person, but many times, as you all know, if somebody is talking directly to you and telling you what is good for you, it is a lot harder to take than if they are telling you how to do good for your family and for your grandchild.

There is nutrition education coming through other programs. For example, some elderly people may be home day care providers. They have a day care program in their home. They usually receive training from IHS nutritionists in the community.

Also, the cooks at the senior sites receive training in food production, food principles, and menu planning. Sometimes this is provided by the nutritionist or the nutrition technician. In some service units, they do training on a quarterly basis; others set up a schedule that works well for their community.

The program that I work for is the Nutrition and Dietetics Training Program. We are a headquarters program. We also conduct workshops on food production and accept people from tribal feeding programs.

We have a week-long workshop where we train participants in meal planning and food production. They actually do cooking when in Santa Fe because that facility has a kitchen to do that.

We accept people for training from senior citizens' programs, but also Headstart and other feeding programs.

Senator BINGAMAN. OK. Thank you.

Dr. Blumberg, do you have some questions?

Dr. BLUMBERG. I think I have more questions than we have time, but let me try a few.

The first one I will address to Ms. Maes. You demonstrated a large unmet need for feeding programs for the elderly. How do you determine who participates in the programs that you do offer? Who gets excluded and why?

Ms. MAES. Well, Dr. Blumberg, most of the senior centers are strategically located in low-income areas, in low-income housing. So they are directed toward the low-income and minority population.

However, we do not have guidelines or criteria for income eligibility for a program. Anyone can come into a senior center and participate, but because of the location of the senior centers they are geared toward more of the low-income minority individuals.

Dr. BLUMBERG. Ms. Crow, you mentioned the USDA's effort on the Food Stamp Program through the Social Security Administration, to provide information on food stamps and nutrition. Especially in light of what the previous consumer panel indicated, that the congregate meal settings are really where they learn about most of

the social service programs and nutrition information and education.

Do you have some information that the Social Security Administration is doing an adequate job and is the right place to disseminate this kind of information to the elderly?

Ms. CROW. Well, it is certainly one convenient place. Really, a lot of people who are receiving SSI payment, supplemental payments, are also on the Food Stamp Program. So there is an obvious link between the two and it serves a useful function for them.

They only have to go to one place instead of two places, and that makes an important difference for people who have particular transportation needs. It is not always easy for an elderly person to go to an office and wait in a line, and this cuts out half the wait.

I think that is a very important contribution toward making life a little bit easier for this important segment of the population.

Perhaps I am really not the best one to answer the rest of your question. There are a variety of places where people can receive information about food stamps and not only food stamps, but the other programs that are available whether it is at the State level or the local level or they are federally administered.

I think people pretty well know, certainly, that the Food Stamp Program is available to them.

Dr. BLUMBERG. Thank you. I have one other question.

I certainly am one that appreciates the wide scope of nutrition programs and nutrition research that the USDA conducts from young children and pregnant women all the way to the elderly.

I was wondering if you are aware of the agency's position that, in light of Gramm-Rudman and related deficit-reduction programs, how the agency is viewing the proportion of their effort that should go to nutrition research and nutrition programs oriented to the group we are interested in here today—namely, the elderly—when they have to make decisions about all of nutrition research?

Ms. CROW. I wish I could answer that question. I am not a part of the agency, the ARS, that is responsible for the fundamental nutritional research that is conducted by the USDA. I was basically serving as a conduit for their information so that you could have it today. I really don't know how they function.

As far as Gramm-Rudman, which is the legislation we have all been hearing about—and I know the Senator has been very actively involved in that—having to do with deficit reductions, there has been a very strong feeling as far as feeding programs go and food stamps that those are exempted categories and that benefits would not be taken away from them if Gramm-Rudman were applied.

Dr. BLUMBERG. Thank you.

I had two questions for you, Dr. Hadley. One is that I think certainly anybody in the aging research area knows that the National Institute on Aging is the premier research institution and has produced some of the most exciting results in this area.

But when we talk about nutrition it seems that we have both the USDA and the NIH involved in what seems very much to be overlapping programs. Are you aware of any coordinating effort between the agencies so that programs are not duplicated or at least are coordinated in their efforts?

Dr. HADLEY. I believe there is some coordination between the National Institute on Aging and the Tufts Center. Our scientific director has a regular liaison with the Tufts Center.

Beyond that I am not aware of any other coordination between NIA and USDA. I may not be the best person to answer that.

Dr. BLUMBERG. I guess I am aware of the ones with Tufts and the Gerontology Research Center.

Dr. HADLEY. Right.

Dr. BLUMBERG. We are concerned more about at higher levels.

Dr. HADLEY. Right. I am not aware of any liaison there. There is a general liaison, between NIH and the USDA through the Nutrition Coordinating Committee, but that is not specific to our Institute alone. We are part of that Nutrition Coordinating Committee so, in that sense, there is liaison.

Dr. BLUMBERG. Thank you. I have one other question, at least.

In your submitted testimony you indicated that NIA and the National Academy of Sciences are planning to evaluate and improve the RDA's for the elderly. Can you tell me where you are in that process?

Dr. HADLEY. Yes; we have had a series of meetings with the food and nutrition board staff. These started about a year ago. The original plan was to organize a conference and then a series of position papers on research needs for evaluating RDA's for the elderly.

Since then, as you know, the timetable for RDA's has been postponed by the National Academy of Sciences. It was planning to issue new RDA's this fall, but this has been postponed.

As a matter of fact, as you may recall one of the reasons it gave for not issuing RDA's at this time was the need to look more closely at nutritional needs of the elderly. Since the change in the schedule we have not had any formal meetings with them, but we are still planning to go ahead with this collaboration.

Dr. BLUMBERG. Can you tell me, are you aware of what the NIH's position is on what the viewpoint or the definition or the perspective should be on what RDA's for the elderly ought to be?

Dr. HADLEY. I don't think there is an Institute position. I can give you my personal one. I think it is shared by many of my colleagues.

It is that RDA's need to be evaluated with regard to health of the aged throughout the life span. It is important to look at RDA's for older people in terms of their specific nutritional needs, changes in absorption and so forth.

It is also important to look at recommended dietary allowances for younger ages as well with an eye to setting them at the best level to prevent disease in later life. One example would be calcium. That is, the intake of calcium early in life may have a great impact on how much osteoporosis appears later in life. One should take old age into consideration when thinking about recommended intakes for younger people as well.

If you could spare me about half a minute, I want to followup a bit on your question about dietary supplements. It is important not to forget that the best way to try to assure a nutritionally adequate diet is to try to get the nutrients into the diet itself.

That is important for both well-understood nutrients and for dietary components whose nutriental role we don't fully understand

yet and are not included in multiple vitamin supplements but which may be very important. Also, many nutrients may be absorbed better when taken in foods than in supplementary forms.

To assure adequate nutrition, the first step is to try to get the nutrients in the normal diet and have a nutritionally balanced diet and then, if that is not adequate, to consider supplementation.

Ms. TOWN. Can I answer that?

It is my personal opinion that it is not a good idea to blanket supplement people. This relates to Dr. Blumberg's statement about the fact that many elderly people fall prey to encouragement to take megadoses of vitamins. Passing out vitamins allows people to not take responsibility for their own nutritional intake.

Granted, if a person cannot afford certain foods, he/she has a certain need; but, the supplements don't give you any protein or any calories. So they cannot substitute for food. It is not a good idea to serve supplements to everyone because the insinuation is that supplements are food and they are good for you.

A person is only recommended to take vitamins if under stress or if they have a special need for a supplement, in addition to normal nutritional intake. So blanket supplementing really is not the recommended method of choice.

Dr. HADLEY. I agree. On the one hand I feel it may be prudent for many elderly to take a minimal nutrient supplement. But, on the other hand, I have great concerns about what that could imply to the individual—that somehow through taking pills and tablets you will answer all of your problems. This could lead to megadosing as well.

Ms. TOWN. It is important to know where a person is first before you make any recommendations about what they should do.

Senator BINGAMAN. All right.

Thank you very much. I appreciate the panel bearing with us. We thank you all for being here.

We may have some additional questions in writing to submit to you after the hearing is concluded and we will include the answer in the hearing record.

Senator BINGAMAN. Why don't we go ahead and get the third panel up here: Dr. Thompson, Kathryn Treat, and Stephanie Fallcreek.

I gather Dr. Thompson has another engagement and needs to leave very shortly. So why don't we go ahead and get started with you, if you would, please.

We appreciate you being here. As I understand, your position is assistant professor in the Department of Family, Community and Emergency Medicine at the University of New Mexico School of Medicine here in Albuquerque, and director of the Geriatric Programs for the Medical School.

We appreciate you being here.

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STATEMENT OF ROBERT THOMPSON, M.D., ALBUQUERQUE, NM, ASSISTANT PROFESSOR, DEPARTMENT OF FAMILY, COMMUNITY AND EMERGENCY MEDICINE, UNIVERSITY OF NEW MEXICO SCHOOL OF MEDICINE

Dr. THOMPSON. Thank you very much for inviting me. I would like to emphasize at the start that I am not an expert in nutrition. I am a clinical physician. I have been at the medical school for 3 years.

It was during this last 3 years as director of the geriatric activities in family medicine that I have become increasingly aware of and concerned about the issue of nutrition in our patients, and that certainly is an extremely common problem.

I think I should also emphasize that my primary experience is with patients—that is, rather frail people—commonly with a number of health problems, not the kind of people who usually come to hearings like this or even commonly go to the senior activity programs that have been referred to to date.

I had no training in medical school in nutrition so my views have come about primarily through years of working with patients and, really, learning through the contact with patients to focus on this as a significant issue.

One of the things that I had been primarily interested in—actually before I got to the medical school, but this has further developed since—and I have developed at least some expertise in is the issue of physical activity for older people. I have a little research project that I just want to briefly mention to you.

I work with a physical educator and an exercise physiologist to exercise impaired elderly people, people with common health problems and functional limitations, people ages 65 to 85. The purpose is to see if these people will functionally improve if they participate in a carefully designed exercise program.

As you folks may know, there is a great deal of information pointing out that older people also will benefit from physical activity programs, but most of the information that is available pertains to well older people. As a matter of fact, most of these studies have excluded people with common health problems.

Well, we have been looking at those kinds of people—people who have diagnoses, take common medications—and we have enrolled them in exercise classes. As a matter of fact, that is what I am anxious to get out for—because we have invited out to our house, at 2 p.m., 80 of these participants over the last couple of years and I am anticipating that there is going to be 40 or 50 of these people arriving at my home at about 2 this afternoon. So I am going to have to move on.

Senator BINGAMAN. If you will give us the address, we will all come. [Laughter.]

Dr. THOMPSON. I want to just briefly explain what goes on in our geriatric evaluation clinic. This is an outpatient clinic aimed at the common and usually complicated health problems that face older people. It occurs as the Family Practice Center at the medical school and it now is a part of the geriatric training for physicians in internal medicine and family practice.

As I have emphasized, most of those patients in that clinic are, indeed, rather frail people. We tend to see, for example, that depression is probably a significant part of the life of at least close to all, if not all, of these patients, and nutritional concerns as they interact with the common health problems that we see, again, is almost always something that we really need to seriously look at.

We do not have a nutritionist working with us, unfortunately. As an example of something that we do have, we have a very good social worker that works with us in that clinic.

As a matter of fact, the funding for that position is due to expire this June. So these are examples of the kinds of constraints that we work with in the clinic setting.

We have, at times in our geriatric clinic, had on loan to us a nutritionist from a research program—as a matter of fact, the research program that Senator Bingaman had referred to earlier that had been started several years ago by Dr. Goodwin here at the university.

Well, his nutritionist has, at times, come over and worked with us kind of on a loan basis. But, from a practical standpoint we really do not have such services available to us.

There is, I am pleased to say, a lot more interest and emphasis on nutritional aspects of patient care in the medical school setting, but most of that emphasis, I think, takes place in the acute-care hospital rather than in outpatient clinics like our own.

Now, just to emphasize three or four specific things that I think we are increasingly aware of and have to pay attention to in our clinic setting. One is that I think we physicians are commonly not very aware of how the medications we give patients may affect the nutritional status.

I am not thinking so much about interaction with the medications as what it may do to the appetite itself. I find that we need to constantly pay attention to the fact that virtually every single medication, including all over-the-counter medications, may decrease the appetite or provoke some kind of intestinal upset which will also add to the person's tendency to eat less.

So by being most therapeutic we risk being counterproductive regarding the nutritional status.

A second thing that is very, very frustrating for us to deal with are some of the behaviors that have been ingrained over long periods of time. For example, taste preferences tend to increase with age and it becomes increasingly difficult for a person who is accustomed to salting their foods or having a fair amount of sweetness flavoring in their food.

Those tastes don't work as well, so the tendency is if we are now salting or eating highly sweetened foods—as a couple of examples—we will tend to do so. Further, we will do more of that as we age.

I like to think of myself in that context because I certainly like ice cream and the risk is I am going to like ice cream even more as I get older. [Laughter.]

Dr. THOMPSON. Another thing that commonly happens is that we become increasingly fussy as we age. So if there are somethings that perhaps we have been eating because we think we should

when we are younger, I think we are going to tend to be more reluctant to do that as we age.

Another very difficult problem, I think, is the issue of using packaged foods. Most of the people who are elderly now did not grow up using packaged foods and I kind of wonder what is going to happen to people of my generation or further back down the road—those of us who are so dependent on packaged foods.

That certainly risks compromising nutritional status as we tend to do this more and more later on in life.

Now, physical activity has been alluded to by two or three people. I think that is, indeed, a key thing. The person who is not physically active—our clinic population, for example—most times is doing rather poorly as far as physical activity is concerned. It is difficult to expect them to, therefore, eat very much if they cannot do something about their pattern of physical activity.

Another very important thing, I think, are family interactions. When Faith Roessel of your office called me a couple of weeks ago, I had in the previous 3 or 4 days had two very difficult interactions in the geriatric clinic with patients and their families where basically the primary or at least some very important concerns of both these families were how the older person, the patient, was eating.

The way that they were dealing with that is, in my interpretation, to badger that older person. They were, then, provoking—at least in one of the patients it seemed very clear—more resistance as a result of her interaction with her daughter to good nutrition.

Her daughter was demanding that she eat well and the patient's reaction was, "I will be darned if I will. I am going to eat what I want to eat."

So, the tactics in dealing with the elderly person's reluctance to eat the way we think that they should may be a very important part. It seems to me that we could use more help in the clinical setting and perhaps, it occurs to me, out in the nutrition centers to look at the advice of family therapists or perhaps psychologists in helping us figure out ways to improve motivation in our elderly population.

Again, let me emphasize that my particular experience is dealing with people who have a wide variety of health concerns and problems.

I think I will stop at this point.

Senator BINGAMAN. OK. Thank you very much.

Doctor, did you have a question?

Dr. BLUMBERG. Well, I guess one obvious one is: Do you find a significant improvement in the kinds of services you were able to offer when you did have the nutritionist present in the clinic?

Did you find that to be a real boost or did you not see a big difference?

Dr. THOMPSON. We did not really have any way of looking at that carefully. We all felt better about having that person there to talk with patients.

If I talk about nutrition with a patient and/or their family, my feeling is they get a certain amount of information and expertise. If I have a dietitian do that, my hunch is that not only is the information better, but that person is probably going to do a better job of talking about that to the patient than I will.

Dr. BLUMBERG. Even in the absence of a nutritionist, do you usually include nutrition-related questions to the subjects? Like, do they have a kitchen or do they do their own shopping or cooking, those kinds of questions?

Dr. THOMPSON. Indeed. Like in most geriatric training facilities nowadays, we have an overall assessment questionnaire. One part of that—in addition to dealing with things like the emotional status, the cognitive or mental function of the person, their ability to do their own daily care things like that—is we also focus on nutrition.

The specific questions that we ask are rather lengthy and, of course, there are about five or six. They are things like: Who fixes your meals for you? How many regular meals do you eat a day? Rather common questions; but we probably only skim off the surface by doing it this way.

Senator BINGAMAN. OK. Thank you. We will allow you to go prepare for your many guests. We appreciate your being here very much.

Dr. THOMPSON. Thank you; and I thank you for inviting me.

[The prepared statement of Dr. Thompson follows:]

PREPARED STATEMENT OF ROBERT F. THOMPSON, M.D.

I am Director of the geriatric programs in the Department of Family, Community and Emergency Medicine here at the School of Medicine, in New Mexico. This includes the Geriatric Evaluation Clinic, and out-patient clinic for the elderly, which I will subsequently describe in more detail. I am far from an expert in nutrition, had no training in the nutrition during my medical education, and have only begun in the past ten years with my clinical experience to appreciate the importance of nutrition in the management of patients, especially the elderly. I have worked as a physician for twenty-five years, the past ten years focusing specifically on elderly patients. I have been a full-time faculty member at the School of Medicine for the past three years. During this time, I have developed a research project regarding physical activity for impaired elderly patients. Briefly, I work with a physical educator and exercise physiologist to exercise impaired elderly people, ages 65 to 85, to see if they will functionally improve when they participate in a carefully designed class of exercises. Though there is a great deal of information about the benefits from exercise for older people who are well, those with common medical diagnoses and physical restrictions are commonly excluded from exercise programs. We have been interested in demonstrating that even typical elderly patients have a great deal to gain from enrolling in carefully structured exercise classes.

I wish to cover the following material: (1) I will describe our Geriatric Evaluation Clinic. (2) I will briefly present some information from a survey of patients in that clinic, done during 1983 and 1984. (3) I will emphasize the most common concerns of the clinician physicians in that setting. (4) I will briefly comment on exposure of physicians in training to nutritional concerns and information. (5) I will present my specific concerns regarding some of the behavioral influences on nutrition for the elderly. (6) I will summarize, and suggest some specific recommendations.

The Geriatric Evaluation Clinic was started in 1982 at the University of New Mexico School of Medicine. It is currently sponsored by both Family Medicine and Internal Medicine. It takes place two half days per week, and usually there is one Internal Medicine faculty physician, one Family Practice faculty physician, one Internal Medicine resident, one or perhaps two Family Practice residents, and an occasional medical student. These providers see 10-15 patients each clinic afternoon, with the faculty physicians seeing a few patients but having the primary responsibility to supervise the residents, reviewing patients in detail. The last hour of each afternoon is set aside for group discussion of the clinical problems encountered. This exposes the training physician to not only physical status and diseases, but also to issues regarding mental function, emotional state, social resources, economic concerns, and, of course, nutritional issues. Questions regarding nutritional status include how many prepared meals does the patients eat each day, who fixes these

meals, types of foods eaten, who buys the food, and are supplements such as vitamins and calcium used.

In this clinical setting, a gerontological nurse specialist did a survey, covering approximately nine months, during 1983 and 1984. A portion of this survey was directed to the concerns regarding nutrition of the patient or their caretaker. This information yet to be published, repetitively showed the following concerns: transportion was a problem, both to get to meals and to get to the grocery store to purchase food; our patients commonly needed help, other than transportation, to do their shopping; financial restrictions often led them to restrict their purchases of such things as meat; and dairy products were often reduced due to difficulty digesting milk products and to attempts to reduce chlesterol intake.

We, the clinicians in the Geriatric Clinic, have become increasingly aware of the following as we see patients:

1. Decrease in appetite is extremely common amongst our patients. We as physicians are commonly not aware of the effect of drugs on food intake, either by decreasing appetite or by provoking intestinal upset. Every single drug taken by an elderly person risks decreasing their food intake.

2. Our elderly patients are frequently depressed, frustrated and therefore less interested in nutrition and many other important aspects of general health care. Family interactions may aggrevate this, with the patient being badgered to eat better. Such may discourage them even further, or stir up even more resistance.

3. Those who live alone frequently comment, "It's not worth it to fix a meal for just myself'. A study done in the East illustrating this point was briefly presented at a January 1985 meeting in San Antonio, of the Society of Teachers of Family Medicine. This particular study showed that those who ate alone had the poorest food intake; those who had someone else fix their meal ate somewhat better; but those who went out to eat with others had the best food intake nutritionally.

4. Though difficulty eating, due to dental problems or changes in esophagus movements, are widely talked about, we have not found very often in our clinic that these are difficulties which patients or their family members acknowledge.

Though the clinical setting is the most effective and most practical place to teach such as things as nutritional awareness, this is infrequently done in medical training. All hospitals nowadays have dieticians included amongst their staffs. Their contact with physicians may be minimal and confined to situations where nutritional concerns are very obvious. Out-patient clinical training commonly does not include the participation of a dietician. Though we have at time, in our Geriatric Evaluation Clinic, been able to "borrow" a nutritionist from a research program, from a practical standpoint, this service is not available to us or our patients. We can send our patients over to University Hospital, for consultation with a dietician; this however entails a short automobile drive, followed by a short walk and elevator ride. In addition, the dietician may be unavailable, due to responsibilities in the hospital. This means that we lose both the opportunity to improve our service and to focus more awareness on nutrition, in the training setting.

I would like to now briefly emphasize some of my personal concerns. Patient management in the geriatric population commonly involves complex interactions and issues. For the most fragile patients, nutrition is almost always a significant concern. Overall strength, immune function, mental function, and disease management are commonly impaired, at least in part, due to inability to maintain nutrition. Dealing with nutritional issues in the clinical setting is often complicated by patterns of behavior learned earlier in life. Thus, dietary habits tend to become more pronounced with age. Taste sensitivity declines, so it takes more of such things as salt and sugar to provoke pleasure and stimulate appetite. We tend to become more fussy as we age, thus more selective of what foods we will use. Those who before have relied mainly on foods easy to prepare, or pre-packaged, will tend to do more so as time progresses. Especially with those elderly people with health problems, physical activity declines, thus further inhibiting appetite.

In summarizing, I will make a few recommendations. My comments are those of a physician-clinician, and I hope will serve to reinforce the concerns of those who represent other viewpoints, and who are perhaps providing services to the elderly.

1. We should continue to focus in a preventive fashion, that is, develop good nutritional habits early in life, so that we can expect to carry over to later life.

2. Training of physicians and other care providers should be encouraged more in training centers. The best area to teach the practical aspects of patient care is in the clinical setting. We cannot expect to support financially such services through billing alone. Educational programs regarding such things as nutrition need outside financial support.

3. Meals are currently being provided to the elderly, with some attention given to the social and educational aspects of such services. Such attempts should be further supported and enhanced, with special attention being given to those elderly whose social skills are most restricted, that is the shy and habitually alone.

4. A personal bias or concern of mine is that of the interactional aspects of nutrition in the elderly. It seems to me advisable that we attempt to utilize resources such as psychologist and family therapist, as we deal with situations in which the most important feature may be the motivation of the patient.

Senator BINGAMAN. Our next witness is Dr. Kathryn Treat who is from Las Cruces. Dr. Treat is the assistant director of home economics for the New Mexico Cooperative Extension Service at New Mexico State University at Las Cruces.

We appreciate you being here.

STATEMENT OF KATHRYN TREAT, PH.D., LAS CRUCES, NM, ASSISTANT DIRECTOR, HOME ECONOMICS, NEW MEXICO COOPERATIVE EXTENSION SERVICE, NEW MEXICO STATE UNIVERSITY

Dr. TREAT. Thank you very much. I would like to briefly speak to two points.

One is an organization, an educational organization that is in place that can address some of the food, nutrition and health problems of the elderly; then some examples of programs that have been conducted in New Mexico this last year; and then, finally, some recommendations.

In New Mexico the Cooperative Extension Service program has three major program areas. One is agriculture and resource development; the second one, home economics, which I am responsible for; and 4–H and youth development.

Our extension personnel work with the people of New Mexico from at least one office location in each county. So it is accessible to the people of the State of New Mexico. Extension faculty inform people of the current research information, interpret and demonstrate its application to the immediate situation involved, and through effective teaching methods encourage the application of such research in resolving problems.

The involvement of people is stressed in both planning and conducting these informal educational programs.

County extension faculty are supported by the resources of a land grant university and the U.S. Department of Agriculture. At New Mexico State University, the support includes subject matter specialists, nutritionists, agricultural experiment station researchers, and resident teaching staff.

I think this is one of the unique pieces of the Cooperation Extension Service: Its research base from the land grant institution, the information the educational programs are based upon. I think that is very important as we disseminate information to people.

Some examples of thrusts in food, nutrition and health in programs in the counties and State this last year including over half of our counties in the State, had programs that focused on the quality of health, longevity, and safety, and reached more than 2,500 individuals through the teaching efforts of professional home economists and 264 trained volunteers.

We also have been active in cosponsoring multiagency health fairs and, in some instances, these have been specifically senior cit-

izen health fairs. I think health fairs facilitate identification of agencies and service for the elderly, and provide inexpensive screening measures that can lead to referral to physicians.

Use of microcomputer technology in Cooperative Extension Service offices also facilitates services to seniors. All county extension home economists have been trained in and have available a computerized nutrition analysis program that can be used on a one-to-one basis with seniors and provide recommendations for improving nutrition.

This program has also been utilized to analyze menus at senior nutrition sites and provide recommendations for improvement.

Other county program examples include training senior companion volunteers on nutrition and health for the elderly; programs at community senior centers on topics such as "Keep Moving to Stay Healthy"; special newsletters on health; features in regular county newspapers on diet and health and fitness; and using professional nutritionists for public programs on topics such as osteoporosis.

The New Mexico Extension Service has also cooperated with the Institute of Gerontological Research and Education at New Mexico State University to provide training for agency personnel and family caregivers.

The extension service has a mandate to serve all people with "practical and useful information in agriculture, home economics, and closely related areas." The elderly are a part of that population being served.

However, without additional resources, the ability to provide intensified efforts is limited. County advisory committees and extension service faculty recognize the needs of the elderly; and, in many instances, the most effective efforts come about through linkages with other agencies and groups to provide direct services or education.

Not only in New Mexico, but nationally the well being of elders would be enhanced by the following recommendations that I had prepared beforehand. It is interesting to hear the comments this morning because I think some of them have been reiterated by the panel members.

No. 1, increase support of human nutrition research, particularly in the area of diet/disease relationships, nutrient interactions, and changing needs throughout the life cycle.

No. 2, centers of excellence to maximize extension education in food and nutrition through training for field staff, intensive updates, symposia, and workshops for multidisciplinary professionals including health professionals, industry, government agencies, and also to serve as a dissemination center for research findings.

No. 3, training grants to improve the expertise of extension field faculty in gerontology. Gerontology is really a new discipline for many of our extension faculty. They are not prepared, educationally, to deal with that.

No. 4, training grants to increase the skills of health service providers and family members to provide support systems needed for noninstitutional living for the elderly.

No. 5, development of a paraprofessional program that would target elderly in small groups for nutrition and health education. This could be modeled after the current food and nutrition educa-

tion program conducted by the extension service that provide nutrition education for low-income young families.

Finally, increased networking of both public and private agencies to maximize the effect of educational programs that address the needs of elders.

Senator BINGAMAN. Thank you very much.

[The prepared Statement of Dr. Treat follows:]

PREPARED STATEMENT OF KATHRYN R. TREAT, PH.D.

NEW MEXICO COOPERATIVE EXTENSION SERVICE PROGRAMING TO MEET THE FOOD, NUTRITION AND HEALTH NEEDS OF OLDER PERSONS

The elderly are the fastest growing age group in New Mexico. Between 1970 and 1980 there was a 64 percent increase in the number of persons 65 years or older, and New Mexico's over-75 population is growing at twice the national rate. However, lifespans of resident-born males or females have not increased in New Mexico as in the general U.S. population, partly because of historically higher accident rates, lower family income and education. Distance has limited early entry and timely access to health care. In-migration of retirees from snow to sunbelt has compounded problems of access to affordable health care.

HEALTH AND NUTRITION

Health and nutrition have undergone dramatic changes since the early 1900's. Consumer questions and current media topics alike focus on food, fitness and prevention of degenerative diseases. The leading causes of death are coronary heart disease, cancer and stroke. In addition, many in our population suffer from arthritis, osteoporosis, diabetes and chronic liver disease. The nutritional contribution to prevention and treatment of these diseases is an area of active research and linkages have been made with diets in numerous studies.

Obesity is also a major problem in the United States and is a known risk factor for heart disease, hypertension, cancer and diabetes. When caloric intake is lowered to achieve weight reduction or diets are modified because of concerns about cancer, heart disease or stroke, nutrition education is especially important. Without good planning, low-calorie diets become nutritionally unbalanced and nutrient deficiencies can occur.

The elderly are particularly at risk since they have lower food intake but essentially the same nutrient requirements as younger adults.

In this rapidly changing setting, nutrition information is sought and needed. Yet conflicting information abounds, and advertising strategies often confuse the consumer. Consumers who fail to distinguish fads, frauds, and fallacies from reliable information often fall into one-sided diet regiments, self-prescribed megadoses of supplements, quick weight-loss plans and spurious cures.

Gigantic industries have been formed to sell health products to the American public. The House of Representatives Select Committee on Aging has described the $10 billion industry which promotes the sale of remedies promising relief from chronic health conditions and has as its target the elderly.

Population trends indicate that the number of small, one- and two-person households will continue to rise, and that the particular needs and concerns of older people will become a more important influence in food product design, retailing and marketing, and that age-related food preferences and consumption patterns may significantly affect the U.S. food system.

COOPERATIVE EXTENSION ORGANIZATION

In New Mexico, the Cooperative Extension program has three major program areas of emphasis: (1) agriculture and resource development, (2) home economics, and (3) 4-H and youth development. Extension personnel work with the people of New Mexico from at least one office location in each county.

Extension faculty inform people of the current research information, interpret and demonstrate its application to the immediate situations involved, and through effective teaching methods encourage the application of such research in resolving problems. The involvement of people is stressed in both planning and conducting these informal educational programs.

County Extension faculty are supported by the resources of the land-grant university and USDA. At New Mexico State University this support includes subject-matter specialists, Agricultural Experiment Station researchers, and resident teaching staff.

COOPERATIVE EXTENSION RESPONSE

Lifestyle consequences is an area of Cooperative Extension Service programing that has been targeted to all population groups, however, examples of special efforts to reach older persons follow.

In 1984-85 programs designed to increase the quality of health, longevity and safety were conducted in one-half of the state's counties, and reached more than 2,500 individuals through the teaching efforts of professional home economists and 264 trained volunteers in 25 program events.

Five counties reported multi-agency Health Fairs, one of which was specifically a "Senior Citizen Health Fair". Health Fairs facilitate identification of agencies and services for the elderly and provide inexpensive screening measures that can lead to referral to physicians. Health screening procedures included height/weight relationships, blood pressure, hearing tests, vision tests, glaucoma check, and dental exams. Blood samples were taken for tests to determine risks for diabetes, anemia, high levels of cholesterol, blood sugar and triglicerides.

Use of micro-computer technology in Cooperative Extension Service offices also facilitates services to seniors. All County Extension Home Economists have been trained in and have available a computerized nutrition analysis program that can be used on a one-to-one basis with seniors and provide recommendations for improving nutrition. This program has also been utilized to analyze menus at Senior Nutrition Sites and provide recommendations for improvement. One county used a computerized "Lifestyle Awareness" program and provided all program participants with an analysis of habits in key areas such as eating, exercise, and stress management, and recommended ways to improve longevity.

Other county program examples include training Senior Companion Volunteers on nutrition and health for the elderly, programs at community Senior Centers on topics such as "Keep Moving to Stay Healthy", special newletters on health, features in regular county newsletters on diet, health and fitness, and using professional nutritionists for public programs on topics such as osteoporosis.

The New Mexico Cooperative Extension Service has also cooperated with the Institute for Gerontological Research and Education at New Mexico State University to provide training for agency personnel and family care-givers. In 1984-85 there were 12 pilot workshops in the state which laid the framework for an expanded project this year. Project objectives include developing a continuing education model and presenting it statewide for family caregivers and service providers. Evaluations from the pilot workshops indicated some of the most preferred topics included identification of community resources, nutrition, stress management, medication management, and intergenerational communication skills.

RECOMMENDATIONS

The Cooperative Extension Service has a mandate to serve all people with "practical and useful information in agriculture, home economics and closely related areas". The elderly are a part of that population being served, however without additional resources, the ability to provide intensified efforts is limited.

County Advisory Committees and Extension Service faculty recognize the needs of the elderly, and in many instances the most effective efforts come about through linkages with other agencies and/or groups to provide direct services or education.

Not only in New Mexico, but nationally, the well-being of elders would be enhanced through:

1. Increased support of human nutrition research, particularly in the areas of diet-disease relationships, nutrient interactions and changing nutrient needs throughout the life cycle.
2. Centers of excellence to maximize Extension education in food and nutrition through training for field staff, intensive updates, symposia and workshops for multi-disciplinary professionals including health and agriculture professionals, industry representatives and government agencies, and serve as a dissemination center for research findings.
3. Training grants to improve the expertise of Extension field faculty in gerontology. Several gerontological centers and land-grant universities offer summer short-courses in gerontology that could be attended by field faculty.

4. Training grants to increase the skills of health service providers and family members to provide support systems needed for non-institutional living for the elderly.
5. Development of a paraprofessional program that would target elders in small groups with nutrition and health education. This could be modeled after the current Expanded Food and Nutrition Education Program that provides nutrition education for low-income, young families.
6. Increased networking of both public and private agencies to maximize the effect of educational programs that address the needs of elders.

Senator BINGAMAN. I think before we ask any questions, why don't we go right to Stephanie Fallcreek. Dr. Fallcreek is in charge of the Institute on Gerontological Research at New Mexico State. I have a long extensive explanation of all your great qualifications, but I misplaced it.

We appreciate you being here. I appreciate your having testified at the hearing we had a little over a year ago. I am pleased to have you here again today.

STATEMENT OF STEPHANIE FALLCREEK, D.S.W., DIRECTOR, THE INSTITUTE FOR GERONTOLOGICAL RESEARCH AND EDUCATION, NEW MEXICO STATE UNIVERSITY, LAS CRUCES, NM

Dr. FALLCREEK. I want to thank you Senator Bingaman, the members of the special committee, its staff, and the audience for giving me this opportunity to discuss this very critical issue.

I also would like to say that I particularly appreciate your leadership, Senator, in the area of health promotion. Nutrition is certainly an integral component of that larger health promotion picture.

Well, there's good news and bad news about being the last speaker. Most of the good news actually has already been given in earlier testimony. We have heard a lot about how wonderful some aspects of our Federal nutrition programs are; and that is true. It is a valuable program. It feeds many people. In the State of New Mexico, as Rita has indicated, it perhaps feeds as much as 10 percent of older residents of the State.

I think, at this point through, my role is to share some "bad news." First, given the abbreviated time available, I will confine my remarks to nutrition and aging in relation to title III programs, although there are many other important related topics which need attention.

It also doesn't feed a lot of elders who need nutritional services too. Increasing the funds in order to provide more meals is really the only way to address that particular deficit.

I am most concerned at this point however, with some other problems in the program.

Clearly, we need more research in the area of nutrition and its relationship to health and aging. However, in the interim between the time in which that research is conducted and the results come in we will continue to provide thousands and thousands of nutritional meals.

We have, I think, to strike a balance between the best clinical experience of nutritionists and service providers, the available research evidence that we do have, and practical common sense guidelines in order to make our Federal nutrition program as optimally healthy as possible.

Unfortunately, an analogy comes to mind about what we did with military personnel some years ago. We provided them with cigarettes as reward and a reinforcement. All the evidence was not yet in about the damages and the dangers. The troops liked the cigarettes and they complained if they did not get them.

We have, I think unfortunately, taken somewhat that same tack in some aspects of our Federal nutrition programs. The "troops" like high sugars, salty foods, and high fats; and we continue to give them what they like, despite mounting evidence of increased health risks.

Now, I am not advocating that we eliminate choice for people in our Federal nutrition programs. What I am advocating is that we offer choice, and that at least some of those choices be optimally healthy ones.

I have been in, visited, evaluated, and reviewed the menus in senior nutrition programs around this State and in other States. In too many sites, salt is added excessively and there are no alternatives to salt as a seasoning at the table or in the kitchen.

Sugar may be added to the tea automatically, rather than as an option. There are not fresh fruit alternatives to highly sugared desserts. Let me emphasize that I am not saying, don't offer people foods that they may have a lifetime habit of eating. I am saying that we need to make sure that we offer them other possibilities.

As one example, look at the calcium deficit that a majority of older persons, especially older women have.

There are many sites in this country that do not offer an alternative to whole milk. I think, that when we don't offer lowfat milk or nonfat milk, or lowfat cheeses what we are doing to that large percentage of older persons who are concerned with obesity—and rightly so—is eliminating a very good source of increased calcium. Even when lowfat milk is available, we too often have not informed participants of the benefits of a lowfat choice.

What are the reasons for this? What are the reasons for these and similar deficiencies in our Federal nutrition programs?

First of all, I think we suffer from a lack of consensus among nutritionists, dietitians, and researchers. Nutrition is a very controversial area. The evidence is not all in, and opinions, even expert opinion on nutritional issues differ widely. For example, on this RDA issue they were very close to issuing a whole new statement and guideline when Federal representatives said, "Whoa. Wait a minute. We cannot come to an agreement on this particular issue. We have to go back and do more research."

It is no wonder that our cooks and our menu planners at the local level feel somewhat lost about what to do when the experts, themselves, cannot even make suggestions about what a recommended daily allowance is in particular nutrients for older adults.

Second, there is a lack of readily available menus and recipes that address group meal preparation in an optimally healthy way. Often locally, sites continue to use the same kinds of recipes and menus that have been in use for years rather than integrating state-of-the-art information, the best information that we currently have, into mass feeding menus and recipes.

Third, there is a distinct lack of funding for nutritionists at the State level, at the planning and service level, and at the local level.

There is a lack of awareness among site managers, cooks and other providers of healthy nutrition principles. It is not that they might not apply them if they knew them; it is that they don't know them in many cases.

Fourth, there is a lack of experience among major food suppliers in many States—and New Mexico is quite possibly an example of that—with optimally healthy nutritional ingredients. For example, using ground turkey in some circumstances to cook their food that might be lower in fat. They simply have not had any experience doing that. Some work needs to be done there and incentives to stock and sell healthier foods are needed.

There is resistance, or perhaps I should say there is a lot of anticipated resistance, to changes in menus among older persons. What I hear from service providers, time and again is they don't want to change, "They will not eat it if we change." That serves as a barrier to trying things out: again, offering people healthier choices.

Another problem relates to the lack of adequate nutrition education at mealsites. Now, I know we have heard that we are doing it. The USDA does it; the nutrition sites do it; the university does it. But what mostly is done is to have some experts who come in, who speak the language that they speak in their normal professional daily activities. That does not make sense to the participants at the mealsites too many times.

They come in and talk for half an hour after the meal when everybody is all full and sleepy. Besides, half of the people have to run to catch the bus that if they don't catch they will not get back home, in order to have some transportation back to where they need to be; and then we pass out pamphlets.

You know, I think the health education folks in this country have demonstrated with a great deal of clarity that the simple presentation of information has the least success of any education intervention possible.

You get a pamphlet that says, "Read Label." Do you take that pamphlet with you to the store and read labels? Have you ever done that? Chances are, you do not.

If we expect people to make nutritionally healthy choices and changes, they need to have skill developed to do that. They need to have had that experience. They need to know what it is like to translate guidelines and principles from the classroom to the home.

Too often, even the information is not appropriate or "accessible" to participants, intellectually, financially, culturally, and logistically.

If we had 100,000 volunteers, like some of the older panelists we had this morning, to go out and do that kind of nutrition education, then we would really begin to make some progress in that area.

I think that we are underusing our mealsites as ideal settings for recognizing that nutrition is more than just food in terms of health promotion. For example, the relationship between physical fitness and nutrition, particularly if we look at something like osteoporosis, is critical.

The evidence is beginning to be very clear that the best intervention is one that combines increased calcium and weight-bearing exercise.

We need to use our nutrition sites to look at issues of medication management because, again, we have food/drug interactions that cause great problems. An example may be that in the State of New Mexico we have a 73 percent higher than the national average rate of fatal falls among people over 75.

We know, in terms of fatal or disabling falls nationwide, that a good number of those are caused by brittle bones—that is, osteoporosis—with medication used, many of the fatal falls that occur at night have to do with medications that people are taking—also lack of balance and coordination that plays a role. People would be able to make some impact on that if they had a good physical fitness program.

We don't have a State or Federal policy that encourages addressing those types of issues. Rita is right: we do have a good emphasis in this State to try to develop fitness programs at least. But unless those kinds of interventions are handed down from the policy level, local providers are not likely to be responding to it. They feel, as many others do in a resource-scarce arena, "I am already doing more than I should, and how can I take on one more thing?"

So unless it is mandated, it is not going to happen.

Despite these shortcomings, there is progress being made. For example, here in the city of Albuquerque, Ron Montoya, the director of the Office of Senior Affairs, is working personally with his cooks and menu planners to try to develop, in Bernalillo County, optimally nutritional meals, and that is something that could be happening in every county in the State.

In our PSA, Valerie Conner, who was unable to be here today, has been working on the bid specifications for menus and trying to develop large wholesale purchase of menu-planning schemes so that those people who are out in rural sites where they prepare very small numbers of meals, for example, can take advantage of price breaks on more healthy kinds of ingredients.

The New Mexico State Agency on Aging and the Institute for Gerontological Research and Education at NMSU recently sponsored a training conference that focused on health promotion in aging. They had more than 300 persons participating, including between 30 and 40 people participating in a series of four workshops on improving nutrition for the aging meal programs.

What I would like to do now is share with you some recommendations I have for how to address these few problems I mentioned and others that time constraints preclude discussing.

First of all, I think we have to provide the U.S. Administration on Aging, which has responsibility for the Older Americans Act and its programs, with some clout. I think unless it comes from the top down in terms of policy, it is not going to happen.

What we have done in the past few years is significantly erode the authority of the Federal agency to set down policy and send down guidelines, particularly when it comes to doing something innovative like taking an optimally healthy health promotion perspective with the mealsites.

I think we need to encourage and support activities programs which recognize the optimal health for elders is a whole list of things. It is nutrition; it is fitness; it is stress management. It is more than just food.

I think we need to provide adequate funding in order to employ or contract with nutritionists at least at the planning and service area level in most of this country. That needs to be money that is set aside for this purpose, not money that comes out of existing meal program budgets.

We have already demonstrated that the existing dollars are not adequate to meet the need. The same thing applies to nutrition education.

You know, the WIC Program has mandated set-aside funds for nutrition education and that is what we need in our Federal nutrition programs, as well. Unless there is a set aside, people are not going to reduce the number of meals in order to provide good nutrition education.

If we want to make nutrition education work in the most cost-effective way, we need to take advantage of the wonderful resources out there in our older persons themselves. That is, we need to encourage and support both paid and volunteer experiences of peer facilitators and peer educators to provide some of the nutrition and health promotion education programs that are needed.

Finally, we need to support and encourage research in nutrition, as you were saying, Dr. Blumberg, and other panelists indicated, but not just basic science research that relates to nutrition and aging because even if we had all of the evidence in hand about what people should—so, unless we similarly had evidence about what kinds of approaches to nutrition education, what kinds of techniques for motivation would actually enable people to apply that information, the information in and of itself is useless.

So I would encourage support for research and demonstration projects that develcp effective strategies for improving nutrition behaviors among older persons.

If we improve content, quality, preparation, and presentation of the meals that we serve under title III–C, and if we will offer the most effective possible nutrition education to elders and their families, then we will make meaningful progress toward reducing disease, disability, and health care costs of older citizens.

If the goal of older Americans is an optimally independent healthy old age—and I think it is—then our nutrition programs can provide them with one critically important tool for achieving that goal. Thank you. [Applause.]

Senator BINGAMAN. Thank you very much. That is an excellent sort of clean-up-hitter testimony there.

[The prepared statement of Dr. Fallcreek follows:]

PREPARED STATEMENT OF STEPHANIE FALLCREEK, D.S.W.

I want to thank you Senator Bingaman, your staff members, members and staff members of the Senate Special Committee on Aging for this opportunity to address some very critical issues. I particularly appreciate your leadership Senator Bingaman in the area of health promotion. This hearing of course is a prime example of your advocacy for elderly and your efforts to bring attention and activity to the concept of health promotion with elders.

As the tried and true commercial says "if you've got your health you've got just about everything." Every day we are learning more about just how important good nutrition is to good health. For many years we have been aware of how critical nutrition is to child and maternal health. We have programs ranging from public education campaigns, to school lunch programs, to special assistance programs for Women, Infants, and Children (the WIC program). Rita Maes and others have identified today some of the components of our primary federally funded nutrition program for older citizens, the meals program supported by Title III of the Older American's Act. While the size of that program is impressive, feeding many elder Americans, and while its coverage is nationwide, reaching into urban ghettos and rural isolation as well as small town and suburban American, the program also has some very real deficits. Some of these can be improved through changes in the Title III program itself, some require more and stronger thoughtful administrative involvement at the state and federal level, and others required the infusion of new funds and/or new priorities in Title III and in other legislated activities.

First, although we have learned much in the past few years about nutrition, health, and aging, much remains to be discovered. Major research initiatives are needed more closely to examine the relationships between nutrient needs and specific as well as general health conditions. For example, we know very little about the requirement of older adults for specific vitamins and minerals in terms of quantity needed, most usable form of ingestion, etc. In fact, there is not yet a single nutrient for which there is a recommended daily allowance for men and women over 65. The evidence about the relationship between calcium and osteoporosis, vitamin D and osteoporposis, and osteoporosis is becoming daily more clear. It seems likely that research will be able to identify other nutritional needs which has similar significant implications for health and well-being of elders. However, in the absence of well-researched specific nutrient guidelines, we will continue to deliver nutritional meals to needy elders. This suggests that our programs in that area should be based upon the most promising balance possible between available research evidence, the clinical experience of nutritionists and other service providers, and the most prudent, logical commonsense guidelines feasible.

An analogy which comes to mind for me is how we provided cigarettes at no or reduced cost as a reinforcement or reward to military personnel for many years. It is true that all the evidence was not in. And it is true that the troops liked and asked for their smoky preferences. And it is true that they complained if they didn't get them. But considere the cost in terms of health and well-being, in terms of productivity, and in terms of health care expenditures for care of cancer and heart attack victims. Although not as dramatically or as clearly, we may be taking somewhat the same approach in our federally supported meal programs.

Consider come tentative research evidence which hears directly on the way in which we design and deliver congregate and home-delivered meals:

Older people typically need fewer calories than younger adults, at least partially due to decreased physical activity.

The body's needs for vitamins and minerals may not be decreased and in some cases, may even be increased (i.e. calcium).

Constipation disproportinately presents problems to older adults.

There appears to be a relationship between hypertension and sodium, excess calories and obesity, cholestrol saturated and unsaturated fats and arteriosclerotic diseases to mention only a few examples.

Yet, our meal sites too often offer high fat, high sodium, low fiber meals which nonetheless do meet the guidelines regarding required caloric values per meal. Little is done which takes into account the evidence we do have.

I have eaten or visited in too many meal sites where salt is the only seasoning available to participants, sugar is automatically rather than exceptionally put in the ice tea (which of course is high in caffeine), non-fat milk is not an available choice, fruit is not available as an alternative to highly sugared desserts, and whole wheat bread is nowhere to be seen.

I am not advocating, currently, that less healthy choices be denied people. Rather, I am recommending that more healthy choices be offered. At the very least give our elder citizens the opportunity to make health-enhancing nutritional choices. Let us further respond to what is known and whereever possible increase the calcium available in the foods offered, increase the fiber and decrease the fats and sodium. There should be little controversy in these suggestions, and yet it is the unusual nutrition site which makes the optimum effort along these lines. The reasons for these nutritional shortcomings are several, including for example:

Lack of consensus among nutritionists which allows meal planners and providers to argue that they needn't change until the "experts" get their act together.

Lack of readily available menus and instructions for group meal preparation and presentation which emphasize an optimally healthy nutrition perspective.

Lack of funding for nutritionists at the PSA and State level in many locations, including most of New Mexico.

Lack of awareness and skill among site managers, cooks, and other providers of optimally healthy nutrition principles.

Lack of experience among major food suppliers with ingredients which offer more healthy nutrients (e.g. ground turkey, fresh fruits and vegetables).

Resistance, or more realistically, anticipated resistance, among participants to changes in the meals toward a healthier diet (perhaps, they do want to large amounts of unhealthy fats, sugars, and salts or perhaps they haven't been offered any tasty alternatives).

A third problem area relates to the lack of adequate nutrition education at the meal sites. Although nutrition education is mandated typically, very little of substance is offered. When the trade off is a little bit more nutrition education or a couple more meals provided, increasing the body count is most likely to win. The site manager also may find it much easier to provide a few extra meals than even the most token form of nutrition education. A lack of program development and delivery skills among site managers of course compounds this problem. Also, the dearth of nutritionists and/or other nutrition educators further complicates the situation.

Fourth, the meal sites could be ideal settings for activities to improve overall health and well-being of participants. The relationship between diet and exercise in terms of chronic disease management (e.g. diabetes, arthritis, and hypertension) as well as disease prevention and health promotion is increasingly clear. Yet, for the most part we have so far failed to take advantage of this opportunity. We could, for example, offer daily exercise programs, whether stretching, strengthening, or aerobic activities, daily before meal service, which would certainly benefit the majority of diners. Other health promotion education could take place after the meals, dealing with areas such as medication management, accident prevention (incidentally, we have a 73% higher than the national average rate of fatal falls among people over 75), physical fitness, use of preventive health services, preventive mental health, etc. Yet too rarely are the "extra" programs and activities of the meal sites focused on these important issues, many of which incidentally relate also to nutrition.

Despite these and other shortcomings in Title III services, program can be and is being made. For example, the Director of the Albuquerque Office of Senior Affairs, Ron Montoya, is personnally working with his cooks toward developing and implementing more healthful meals, with a greater emphasis on use of vegetables, complementary proteins, and baking and broiling rather than frying and breading. TIGRE recently has been working with several sites in Dona Ana County, doing a nutritional computer analysis of the menus. The contractor there, Services for Seniors, already has been effective in reducing unneccesarily high fat content in the menus and moving overall toward healthier patterns.

Similarly, Ms. Connor, the nutritionist in PSA, is working with the bid specifications to institute healthier alternatives, such as use of ground turkey rather than higher fat meats, in many dishes. Recently, TIGRE and the New Mexico State Agency on Aging sponsored a health promotion conference which included four sessions for nutrition site personnel on improving nutrition. Dietary analysis for individual meal site participants also appears to show much promise. At least participants are interested in finding out more about the quality of their daily nutrition habits.

What then can be done to improve the health and well-being of elder citizens in terms of nutrition and through our meal site programs?

Provide the U.S. Adminsitration on Aging with language in the Older American's Act and clout in the regulations which implement the Act to oversee and ensure that nutrition programs are implemented to be optimally health-enhancing.

Provide adequate funding for mandated nutritionist at the PSA level, whose responsibility will be to integrate a health promotion approach in congregate and home delivered meal programs and who will coordinate or at least oversee the provision of meaningful nutrition education for meal site participants, other elders, and caregiving family members.

Support training for nutrition site staff, including peer workers-paid and volunteer, to enable them to improve the quality of nutrition site programs.

Increase the support and use of older workers in a variety of programs related to providing health-promoting services in conjunction with Title III programs, including paid and volunteer positions.

Include nutrition education as a mandated service in Title III programs with adequate support which does not cut back the number of meals-served.

Support and encourage research in nutrition and aging, including basic research into the relationships between nutrition and health as well as research and demonstration activities develop effective strategies which result in improved nutrition among elders at meal sites, at home, and elsewhere.

If we will improve content, food quality, preparation and presentation of the meals we serve under Title III and if we will offer the most effective possible nutrition education to elders and their families, then we will make meaningful progress toward reducing disease, disability, and health care costs for elder citizens. If the goal of older Americans is an optimally independent healthy old age, and I think it is, then our nutrition programs can provide them with one important vehicle toward acheiving that goal.

Senator BINGAMAN. Doctor, did you have some questions for either one of the witnesses?

Dr. BLUMBERG. No, I think both of the presentations were very good and, I think, touched on the points.

I guess I would like to just make one comment, though, Dr. Fallcreek. I think that there is, in fact, a great deal of consensus on most of the important issues by nutrition scientists with regard to dietary fats, and calcium, and fiber, and so on.

I think the basic problem comes at much higher levels with regard to what the definitions ought to be for preventing deficiencies or trying to promote optimal health. I think the problems lie a little more in policy than in terms of what our understanding on nutrition really is.

Dr. FALLCREEK. I could not agree more.

Senator BINGAMAN. OK. Why don't we conclude everything, since we are running late anyway.

Let me thank everybody again, the panelists in particular but also the people who have come and taken an interest in watching and listening to the testimony today.

We are going to show this half-hour film. Some of you may not have been here the first time I mentioned it. It is a film that puts you through a short quiz on how to live longer.

It is produced by Hoffman-LaRoche. We are going to put that on the video machine here if anybody wants to see it. There are questionnaires that are available that go along with the quiz.

The testimony that you have heard here is in written form on the table outside. If any of you want to pickup copies and have not, please do so. We are going to leave the hearing record open until January 15, in case there are comments or additional statements that anybody would like to make.

Rita, did you have a statement to make?

Ms. MAES. I don't have a statement, Senator, but I did want to inform the audience that Valerie Conner from the Southwestern Area Agency on Aging was unable to make it. Because of the time limitations, we were unable to highlight her testimony.

However, as Senator Bingaman said, her testimony is outside. Please get a copy. She specifically talks about the Hispanic elderly in the southwestern portion of the State.

Thank you so much.

Senator BINGAMAN. Yes, it is very good testimony and I recommend it to you. We will insert that statement and additional comments of Ms. Amertius Burroughs in the record and a statement we have received from Ms. Ophelia Rinaldi.

Again, I want to thank everybody for being here. Dr. Blumberg, we appreciate you being here in particular.

[At this time, the hearing was concluded.]

APPENDIX

MATERIAL RELATED TO HEARING

FOOD AND DRUG ADMINISTRATION'S ACTIVITIES TO INCREASE PUBLIC AWARENESS OF NUTRITION

The Food and Drug Administration's (FDA) efforts to increase public awareness of nutrition take many forms, including developing food labeling regulations relating to the nutritional content of foods. Primarily, however, FDA engages in a host of educational initiatives to inform consumers, health professionals, scientific advisors, industry and its associations, professional and citizen organizations, Congress, State agencies, and foreign governments on a wide variety of nutritional issues.

The means used to inform these groups are as varied as the groups themselves. Under the general heading of communication and education, FDA has been actively involved in the following:

- o responding to over 50,000 consumer letters and inquiries a year which request information on food and nutrition, etc.;
- o publishing and circulating the magazine FDA Consumer which has dedicated numerous articles to nutrition and related areas;
- o reprinting 100,000 of these articles from the FDA Consumer which are provided free on request to FDA or through the Consumer Information Center, Pueblo, Colorado.

- o maintaining a staff of about 34 Consumer Affairs Officers throughout FDA district offices who serve as a liaison to consumers and health professionals. Approximately one-half of their time is dedicated to food and nutrition issues;

- o conducting surveys to determine consumer interests and needs;

- o participating in numerous national initiatives to study and improve nutrition, such as the Surgeon General's Report on Diet, Nutrition and Health, Nutrition Education Task Force, Nutrition Objectives for the Nation 1990, and the recently published Dietary Guidelines for Americans;

- o participating in national meetings through speeches on FDA's current activities and policies; and

- o publishing regulations and guidelines to increase the nutrition information provided to consumers on food labeling.

Sodium Initiative

One area which has involved virtually all of the above activities has been sodium awareness and reduction. In response to the growing medical concern over sodium in the diet, FDA in 1981 launched a major initiative to provide more information to consumers about the association between sodium consumption and hypertension; provide consumers with a wider choice of foods with reduced sodium content; and reduce the amount of sodium added to foods. Specifically, the initiative has involved educating the public about sodium through a variety of means, including the dissemination of brochures and the airing of radio and television public service announcements; monitoring changes in sodium consumption; and increasing sodium content labeling on processed foods by adding a sodium information requirement to our nutrition labeling regulations.

In 1978, FDA conducted a nationwide consumer survey in which the following question was asked of approximately 1,400 individuals who read ingredient labels: As a result of reading ingredient listings, what are you avoiding or limiting in your diet? In 1978, only 14 percent of those participating in the survey indicated that they were trying to avoid or limit sodium intake. By the end of 1983 this figure had nearly tripled to 40 percent. This survey will be conducted again in the spring of 1986.

Another indication of consumer awareness is the number of inquiries received by FDA. Consumer inquiries pertaining to "sodium" have taken an almost three-fold leap from 1983 to 1984. In 1983, FDA received approximately 6,400 inquiries on sodium; in 1984, FDA received over 17,000 inquiries and requests for sodium publications. Inquiries on "sodium" constitute the single largest area of consumer interest.

Sodium Labeling

To further encourage manufacturers to reduce added sodium in processed food and to make more information available about the sodium content of foods, FDA's nutrition labeling regulations were revised to require that labels that provide full nutrition information will also include the milligrams of sodium contained in each serving. In addition, the regulations specify and define the sodium-related terms that may be used in labeling. These include "sodium-free" (used when there is less than 5 milligrams of sodium per serving), "very low sodium" (35 milligrams or less), "low sodium" (140 milligrams or less), "reduced sodium" (processed to reduce the usual level of sodium by at least 75 percent), and "unsalted" (processed without salt whereas the food normally is processed with salt). These terms are designed to enhance consumer understanding by indicating relative amounts of sodium in various foods, ensure consistency in the marketplace, and prevent potential consumer confusion which might arise without standardized terminology.

The sodium labeling revisions to the regulations will become effective across-the-board on July 1, 1986 to allow manufacturers sufficient time to prepare the new labeling and avoid any increase in costs to consumers if existing label inventories for slow-moving products could not be utilized. Manufacturers have promised that in many cases they will add sodium declarations before this date as current label inventories are depleted.

Potassium Labeling

The current nutrition labeling regulations have also been amended to provide for potassium content information expressed as milligrams of potassium in a serving of food to be placed on the label immediately following the sodium content. Unlike the sodium requirement, the potassium provisions are not required as part of nutrition labeling since available data do not suggest any public health concern about current or anticipated levels of potassium consumption by the American population as a whole.

National Cholesterol Education Program

Saturated fatty acid and dietary cholesterol deserves special attention in our nutrition awareness and labeling program, and barriers to more informative labeling should be removed. In many respects, however, FDA's efforts in this area are just beginning, as evidenced by the fact that only six percent of FDA-regulated foods contain specific cholesterol information on their labels. This situation needs to improve, and FDA's published regulatory program commits the Agency to action in this area.

To increase public awareness, the National Heart, Lung, and Blood Institute has begun developing a National Cholesterol Education Program to reduce coronary heart disease morbidity and mortality attributed toelevated blood cholesterol. Many organizations and agencies have assisted the National Heart, Lung, and Blood Institute in developing strategies for this new effort, including FDA, USDA, the American Heart Association, the American Medical Association, and the American Public Health Association. Its goals will be accomplished through the development of a national educational effort and through extensive cooperation and coordination with other Government agencies and intermediary groups in the private sector. This new program was kicked-off last month. Since March there have been six strategy development meetings, involving Government members and the medical community, to chart the future course of the program.

FDA will be involved in several aspects of this program, including advising institutions and supermarket chains on appropriate fat and dietary cholesterol shelf-labeling initiatives and meeting with industry on the development of low-fat, modified fat and lower dietary cholesterol products (including encouraging labeling which emphasizes that foods derived from the plant kingdom are cholesterol-free). FDA is involved in development of criteria and proposed improvements in cholesterol labeling, coupled with fatty acid labeling. Moreover, FDA has publicly announced that it is presently developing an amendment to its labeling regulations that will propose terms for use on labeling (e.g., "cholesterol free," "low cholesterol," and "reduced cholesterol"), in conjunction with quantitative cholesterol declarations, that will be helpful to the consumer and prevent misleading labeling.

Item 2

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 16, 1985

Senator Jeff Bingaman
502 Hart Senate Office Bldg.
Washington, DC 20510

Attention: Faith Roessel

Dear Senator Bingaman:

Please accept the following written testimony as input to the field hearing entitled: The Relationship Between Nutrition, Aging, and Health: A Personal and Social Challenge.

As funding tightens, we must prioritize services. In my opinion, health care services, especially, preventive health care services are top priority.

Good nutrition is a main ingredient to good health. Yet, there are many elderly in our society of whom lack good nutrition which threatens their over-all well-being.

Some elderly are unable to prepare or search-out a well balanced meal for themselves, due to health problems. So it becomes a vicious cycle in which present health problems impede good nutrition which in turn impedes improvement in health.

Many elderly, due to the lack of financial resources, are unable to purchase more nutritious foods or enough food to support a well-balanced food diet.

For many seniors of whom receive a lunch meal at senior meal-sites and/or senior centers, it may very well be their only meal of the day. It is probably their most nutritious. Please see a-tachments, which explain some senior nutrition services in Bernalillo County.

Transportation is a critical issue in providing meal services to the elderly. Many elderly are unable to transport themselves or lack transportation. Some elderly are home-bound and need meals delivered to their residence.

I feel, strongly, that we must continue to support and expand nutrition services to the elderly. We need to, especially, target those elderly most in need.

AN EQUAL OPPORTUNITY EMPLOYER

62-178 O - 86 - 4

Presently, there is no means testing for elderly individuals of whom are eligible for Older American Act, Title IIIC nutrition services. Donations are encouraged, but no fees are required. If the lack of funding reaches critical levels, we may have to implement means testing to more accurately target those elderly most in need. I'm unsure if this is a viable alternative.

In closing, nutrition services are a vital component to the continum of care services for the elderly.

Very truly yours,

Ken Villani

Ken Villani, Coordinator
Area Agency on Aging

KV/tb

Attachments

NUTRITION PROGRAM NARRATIVE

OSA's Nutrition program is responsible for the direct delivery of meals services at fifteen meal sites throughout Bernalillo County. OSA provides supporting social services at thirteen of those sites while two are managed by other agencies.

A total of 1,065 Nutrition program meals are provided daily. Weekend meals will be provided to 100 homebound elders throughout the program year.

Congregate Nutrition Service Delivery

The anticipated number of congregate meals to be served to the area's elderly population during FY 1985 under the auspices of OSA's Nutrition program is 835 daily meals. Of the 208,750 congregate meals 104,337 will be provided by non-Older Americans Act Funds.

In addition to the meal itself, all existing supporting social services for the elderly of Bernalillo County are available to the participants of all meal sites. These coordinated services include transportation, recreation, preventive health education and screening of all services of the Information & Referral and Outreach components of OSA. Meal site workers and OSA Outreach workers identify and incorporate into the Nutrition program those elders with the greatest social and economic needs.

The menu planning process involves participant input in two ways: (1) the Nutrition Project Advisory Council reviews the proposed menu on a monthly basis at its regular meetings and suggest changes when a consensus can be reached; (2) results of the food quality monitoring system which is conducted daily at all meal sites by participants are reviewed prior to menu planning and consideration of these results are taken when planning the following months menus.

Using the above process, six week menu cycles are developed by the program staff in cooperation with Nutrition program cooks. Each cycle is repeated once, after which a new menu is developed, coinciding with the seasons/fiscal quarters. Menus are calculated to determine each day's nutrient content and to ascertain whether they contain a minimum 1/3 of the current recommended dietary allowance as established by the National Academy of Science's National Research Council. Consideration is given at all times to provide a wide variety of entrees, including ethnic selections commensurate with religious and cultural backgrounds of the participants. The Nutrition program is the recipient of USDA commodities for use in its meals program. Care is taken at all times to incorporate into the menu those selections which are nutritionally valuable and to avoid foods which may be detrimental to participant's general state of health (highly salted and/or sweetened foods). Special menus are not available to participants of the program having specific dietary needs.

Complaints about nutrition service delivery and menu selection are handled on a daily basis through the monitoring system used by all meal sites. One participant from John Marshall, SMSC and North Valley is selected weekly to evaluate the quality and selection of food being served. The participant completes a standard form developed for this purpose and the information therein is relayed in writing to the administrative office of the Nutrition program.

The Nutrition program coordinates with the Easter Seals Society, Inc., for the provision of transportation; with the American Heart Association, the American Lung Association and the Diabetes Foundation for periodic health screening.

Approximately 2,500 persons will be served during the program year, of which 82% are minority and 70% are low income.

Non-eligible participants (those who have not yet reached the age of 60 or who are not married to someone this age or above) are considered as guests at meal sites and are requested to pay $1.75.

The selection of meal site locations is based upon available demographic data and, as such, target populations of elderly people in the greatest social and economic need are identified and nutrition services made available to this group.

Methods used to reduce and/or contain meals costs, thereby enabling the program to expand its services includes the preparation and freezing of weekend home-delivered meals during the normal work hours of staff cooks rather than specially purchasing prepared meals or extending the staff cooks' work hours into the weekend. Baked goods are purchased from a commercial bakery.

Participants are encouraged to make contributions for the meals they receive in order to partially offset the total cost of the meal provided. A minimum donation of 60 ¢ per meal is suggested program-wide, although "Fair Share" contributions, based on a sliding scale of participants' monthly income, is encouraged. Signs to this effect are posted at all sites.

Non-eligible participants must pay for their meals. This charge covers the cost of raw food and cooking personnel but does not include extraneous expenses such as space, utilities or support personnel. These expenses are absorbed by the City of Albuquerque and are considered as contributions. Lunch tickets are issued at the time a participant offers his donation and are collected by the site worker as the meal is being served to individuals. At the conclusion of the meal, the site worker and a volunteer together count the daily receipts and this amount is reported to the office of the program director.

Contributions are deposited daily by program personnel into the bank with which the City does business. Disbursements are made from this account for allowable program operations costs.

Home Delivered Meal Service Delivery

The Nutrition program will provide 230 daily home delivered meals on 250 serving days to the frail and isolated elderly of the community. In addition, 100 of these elders receive weekend meals which are delivered frozen on Friday. These 100 people, it has been determined by a survey, have no means of preparing weekend meals themselves, nor do they have family to assume this responsibility for them. The weekday meals are prepared in program kitchens, delivered in bulk to nearby meal sites in heated food transporters and individually packed at the site for delivery to participants' homes. Food temperatures are maintained at the optimum 104° level through

the use of specially designed food carriers. Home delivered meals are delivered by two station wagons throughout the county daily. Maximum delivery time between preparation site and participant is 1 1/2 hours.

Referrals to the Nutrition program for home delivered meals are made by OSA Outreach workers and Information and Referral specialists based on the level of need indicated during an initial interview with the client. A complete assessment is done by a caseworker and eligibility is determined by specific indicators. These indicators include physical and mental condition as well as the availability of family assistance.

Eligibility criteria for participation in the home delivered portion of the Nutrition program include the following considerations: (1) physical health; (2) mental health; (3) mobility; (4) availability of transportation; and (5) availability of family assistance in preparing a Noon meal for the homebound elderly applicant. Applicants are re-evaluated bi-monthly by meal site workers and OSA outreach workers for continued eligibility.

Meals on Wheels, a private non-profit agency providing home delivered meals, works very closely with the Nutrition program in the delivery of home delivered meals services. Since Meals on Wheels has a set fee for its daily meals, that agency refers those elders who are financially unable to buy their services to the Nutrition program. In addition to the regular coordination that exists between the two agencies, the City's Nutrition program subcontracts with Meals on Wheels for the preparation and delivery of 22 daily home delivered meals to residents of the La Mesa neighborhood.

The estimated number of people to be served during 1986 will be 250.

Identification of persons with the greatest social and economic need for home delivered meal services include the eligibility criteria enumerated above, as well as the individual's income level. Income is considered to ascertain whether the applicant is able to financially afford Meals on Wheels services.

Program income is collected weekly from the participants by the driver who delivers the meals. The program-wide suggested contribution amount applies to the home delivered meals as well as the congregate meals. Each Thursday contributions are deposited by participants in a locked metal box carried by the home delivered meals driver and deposited the same day into the City's bank account.

Item 3

Jan Mills, President
New Mexico Dental Hygienists'
2943 Plaza Blanca
Santa Fe, NM 87505

January 10, 1986

The Honorable Jeff Bingaman
United States Senator
Dennis Chavez Federal Building
Room 9017
500 Gold SW
Albuquerque, NM 87102

re: Special Senate Committee on Aging: NUTRITION FOR THE ELDERLY.

Senator Bingaman,

The New Mexico Dental Hygienists' Association would like to testify to the importance of good oral health as it relates to good nutrition for the elderly. Decayed teeth, periodontal disease which causes loosening of the teeth, ill-fitting dentures and partials all hinder the mechanics of chewing thus affecting nutrition. Oral cancer is also more prevalent among the elderly.

Programs that would promote good oral health for the elderly should be encouraged if good nutrition is to be realized.

Sincerely,

Jan Mills

Jan Mills, RDH
President, NMDHA

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DIANE LIPSEY, MINORITY STAFF DIRECTOR

Item 4

United States Senate
SPECIAL COMMITTEE ON AGING
WASHINGTON, DC 20510

ADDITIONAL COMMENTS

SENATOR BINGAMAN:

If there had been time for me to testify at today's hearing, "The Relationship Between Nutrition, Aging, and Health: A Personal and Social Challenge," I would have said the following:

There are many social, psychological, and physical influences to be considered in elderly nutrition programs. The emphases in my nutrition education workshops has been first, to make the site directors and cooks at District II Area Agency on Aging nutrition sites aware of these influences in order to make the meals appetizing and attractive to the senses so that the seniors will want to eat.

Secondly, as our need for kcalories can drop as we get older, our need for other nutrients such as vitamins and minerals does not. Therefore, I have emphasized planning meals that provide nutrient density or a high ratio of nutrients to kcalories.

Finally, I have used the USDA Dietary Guidelines for Americans in incorporating more low sodium, low cholesterol, high complex carbohydrate meals in our senior citizen meal sites by giving the cooks tips and recipes to follow the guidelines.

May I recommend more nutrition education in the nutrition sites, especially in the counties with very low income participants where the need is greater, and where for some elderly the meal provided by the centers is the only meal

Please Print: NAME Carolynn Sanches Wilson, Nutritionist
ADDRESS District II Area Agency on Aging
1310-C Osage
Santa Fe, New Mexico 87105
TELEPHONE

they get for the day. In addition, the meal sites need to be open seven (7) days a week and especially on holidays when a senior citizen is most likely to be depressed and need the companionship more than the meal.

JOHN HEINZ, PENNSYLVANIA, CHAIRMAN
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United States Senate
SPECIAL COMMITTEE ON AGING
WASHINGTON, DC 20510

ADDITIONAL COMMENTS

SENATOR BINGAMAN:

If there had been time for me to testify at today's hearing, "The Relationship Between Nutrition, Aging, and Health: A Personal and Social Challenge," I would have said the following:

Having worked with senior citizens in northern New Mexico for the past 8 years not only as a participant at meal sites but as a member of the advisory board for the Mora-San Miguel Counties Nutrition Center. At the regular meetings we hold once a month, most of our time is spent discussing the problem of making ends meet as our director is constantly telling us about the cost of providing meals for seniors, and the monies available are very limited. Little or no time is spent discussing the problem of serving a balanced meal. I believe that we senior citizens should have something to say about the food we eat and most of us have a pretty good idea of what we like to eat and how it should be prepared. We are aware that low-fat diets are better for us. I learned about sodium salt being harmful to people with hypertension a long time ago. Many of us have been put on a diet by M.D.'s at one time or another. Rest assured that many senior citizens know what is good for them, perhaps this is why they have lived to be as old as they are. I believe food served at the senior centers should be based on local culture. An

Please Print: NAME Roberto M. Roybal
ADDRESS
Pecos, new Mexico 87552
TELEPHONE

(Continued)

85 year old Hispanic-American said "I have eaten pinto beans and chili all my life," and he does not believe that too much meat is good for anyone because he has learned that it contains saturated fat that is not good. Many times I have seen a lot of food left in the trays at meal sites and thrown away because senior citizens did not like it. The menues are made up by nutritionists who illiminate foods that native people are used to eating.

Thanks for inviting me to comment on this matter, and thank-you very much for your concern in senior citizens' health.

Sincerely,

Roberto M. Roybal

Roberto M. Roybal
Senior Citizen from Northern New Mexico

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ADDITIONAL COMMENTS

SENATOR BINGAMAN:

If there had been time for me to testify at today's hearing, "The Relationship Between Nutrition, Aging, and Health: A Personal and Social Challenge," I would have said the following:

I would like USDA to consider the more recent research findings regarding Nutrition among the Elderly and the substitution of "unsaturated" foods such as cheese & butter instead by Mr. Cow. Over & over again the scientists have reported the need for the elderly to reduce their intake of saturated fats, especially to diets. Unfortunately such findings are not incorporated (or considered and/or) in helping the elderly and, by distributing foods such as cheese & butter.

I wish we could incorporate our recent findings into practices & nutrition education & distribute the foods for their health.

In summary "How about following USDA/ACS/& American Heart Association's guidance in distribution of so called Commodities??"

Please Print: NAME VIJAY S GHALLA

ADDRESS

TELEPHONE

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ADDITIONAL COMMENTS

SENATOR BINGAMAN:

If there had been time for me to testify at today's hearing, "The Relationship Between Nutrition, Aging, and Health: A Personal and Social Challenge," I would have said the following:

Our Nutrition Program is striving to Provide a well balanced meal at Home at our nutrition Centers. We also have meals on wheels which we deliver and Contract with St Vincent's Hospital for special diets prescribed by doctors. We also deliver Meals to Isolated, Immobilized and Handicapped Senior Citizens we have two full Meal Sites five(5) days a week. We are in need of more funds for nutrition to serve more Seniors who would like to participate in the Program, and expand the program to 1 meal for 7 days a week. We also would like to make our Meals more in keeping with Senior Diets, as of Last Month we served 675 of meals at our Santa Fe Meal Site we also served 2012 meals on wheels out of Santa Fe, Pojoaque & El Rancho meal site served 966 walk in and 644 meals on wheels, we also served special diets from St Vincent's Hospital To 349 for a Total of 10,725

Please Print: NAME JOSEPH L VENTURA

ADDRESS

SANTA FE, N.M. 87501

TELEPHONE

JOHN HEINZ PENNSYLVANIA CHAIRMAN
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ADDITIONAL COMMENTS

SENATOR BINGAMAN:

If there had been time for me to testify at today's hearing, "The Relationship Between Nutrition, Aging, and Health: A Personal and Social Challenge," I would have said the following:

Local residents have provided nutritional meals for the elderly as well as meeting many of their social needs. These programs must be continued to maintain the health of our increasing population of the elderly. I work cooperatively with Home Health Care programs in Albuquerque by providing nutrition information for Senior Companions and other Home Health Care workers. I have observed the lack of nutrition education in the training curriculum for these health care workers. Perhaps the Cooperative Extension Service could play a greater role in the nutrition education of the paraprofessionals working with the elderly. Although I work in a program that deals primarily with young, low income families (EFNEP), I believe that Home Economists in the Extension Service have the expertise to contribute to the nutrition education of those working on a daily basis with the elderly. This resource could be more fully utilized.

Please Print: NAME Joanne Roman

ADDRESS

Albuquerque, NM 87102

TELEPHONE

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LARRY PRESSLER SOUTH DAKOTA — LAWTON CHILES FLORIDA
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ADDITIONAL COMMENTS

SENATOR BINGAMAN: page 1 of 3

If there had been time for me to testify at today's hearing, "The Relationship Between Nutrition, Aging, and Health: A Personal and Social Challenge," I would have said the following:

Thank you, Senator Bingaman, for this opportunity to add my testimony on Nutrition and the Elderly. Thank you also for your efforts, to name a couple, Health Net New Mexico and the increase taxes on cigarettes. The fact that you scheduled this Hearing is evidence of your sensitivity to the problem and to the possibilities.

I am Virginia Crenshaw, I am the State Coordinator for Health Advocacy Services - a program of the American Association of Retired Persons and the Retired Teachers Association. I have been asked to speak for these two groups. In New Mexico we have 100,000 members of AARP and 4300 members of Association of Educational Retirees.

The meals programs, supported with public funds, are great as far as they go. The nutrition-ness of some of them needs to be improved. And I know you are tired of hearing about the transportation problems, and the vans are great and are essential. But with so little funding, the vans are so few, and the driver's time is so short, that their schedules

Please Print: NAME Virginia Crenshaw

ADDRESS

Albuquerque, New Mexico 87110

TELEPHONE

are rigid. With flexible schedules, the elderly could have time for much needed learning and encouragement about foods and food preparation. Also with flexible schedules, they could be encouraged to enjoy exercises for fitness along with social contacts and nutritious meals.

I realize that programs cost money. The necessary money is not coming from the federal pot, and I expect more cutbacks. So - I suggest we go for money where the money is, while the poor are getting poorer, the rich are getting richer. I propose going to the wealthy, to the private sector, to big business, especially food business, the producers and the grocery stores.

The federal government has it within its power to grant incentives: major incentives to the food industry for major consideration to the health of the elderly. I have a few examples of what industry could do

1. About canned fruit: the usual heavy syrup is too sweet. The lite or water packed that is now available is not sweet enough, has no flavor, and old folks add sugar to it. There is an inbetween in the #10 large commercial cans. It is called "light syrup" or "Grade B Extra Standard Lite Syrup". This should be made available in small cans. Of course new products are a gamble. Maybe they will not turn a profit. Here is where the government incentive comes in.

2. About food information: Little flyers in simple language, attractive, suitable to our different cultures could be specially designed and printed for the elderly (stimulated by the incentive). They could be made readily available in grocery stores, and ofcourse in senior centers. The flyers would be informational about nutritious foods, with recipies for cooking for 1 or 2 persons, for such foods as chicken, fish, non-processed cheese, whole grains to name a few.

3. About frozen foods: especially fish, more should be

frozen plain, not breaded. It should be packaged so one or two pieces could be used at a time. This is more costly to the producer for a smaller market. So they cannot be expected to do it without the incentive.

4. To make suggestions: There are plenty of people with knowledge and suggestions, more than I have right now. A task force could be appointed, if it does not already exist, to suggest (with appropriate incentives to industry) ways to implement the knowledge that already does exist. There is knowledge about nutrition - lots of it - that is not being put to use where it is needed, in the kitchens of the elderly.

5. About the use of knowledge: government does not have the available money, and industry does not have the motivation, to make the best possible use of knowledge that is already known. I refer to knowledge that could be used in community clinics, knowledge that is possessed by the medical and nursing and pharmacy faculties at the University of New Mexico. Hopefully government can make it worthwhile for industry to support such community clinics. I look for community clinics for health promotion in such areas as nutrition, fitness, and wise use of medicines. I look for more active teamwork among government, industry, and the health professions.

Thank you for the opportunity to bring these matters to your attention.
I am glad you are on the Senate Special Committee on Aging

Virginia Crenshaw

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ADDITIONAL COMMENTS

SENATOR BINGAMAN:

If there had been time for me to testify at today's hearing, "The Relationship Between Nutrition, Aging, and Health: A Personal and Social Challenge," I would have said the following:

I am a faculty member at the UNM College of Nursing, teaching in the Geriatric Nursing course which is required for undergraduates. I am also an Adult Nurse Practitioner and have recently worked in Nursing Homes and health programs in Senior Citizen residences.

I wish to address two problems related to nutrition in the elderly that were only dealt with briefly in the hearing. In addition I want to mention plans developing in our College that will impact on these problems.

A major factor in malnutrition in the elderly is failure to ask for assistance due to fearing loss of independence. Numerous related problems such as decreased mobility, pain, sleep problems, depression, inadequate support systems, breathing and circulation as well as medication effects must be addressed if nutrition is to be improved.

Another important nutritional problem of the elderly is obesity. This adversely affects mobility and self care as well as sleep, comfort, and self-esteem.

Such complicated problems with numerous interrelated factors affecting both

Please Print: NAME Sara J. Anderson, R.N., M.S.N. Sara Jane H Anderson

ADDRESS College of Nursing, University of New Mexico
Albuquerque, New Mexico 87131

TELEPHONE

causation and appropriate intervention require approaches which are knowledgeable, individualized and long-term. A strong emphasis on supportive counseling, behavior modification and mobilization of family and community resources is required. Professional nurses by education and experience are prepared to deal with these problems effectively. The College of Nursing at the University of New Mexico, in collaboration with the State Agency on Aging, is presently planning a Geriatric Nursing Clinic. Services will include individual clinic appointments, home visits plus group health teaching and support groups. Another major goal of the clinic will be to develop a model of community based, professional nursing care which will be promoted and taught to other nurses in this community and state-wide. This effort can serve as a major resource in alleviating some of the most difficult nutritional problems of the elderly.

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ADDITIONAL COMMENTS

SENATOR BINGAMAN:

If there had been time for me to testify at today's hearing, "The Relationship Between Nutrition, Aging, and Health: A Personal and Social Challenge," I would have said the following:

The testimony of Lonie Crow is served to reflect the position of the Reagan administration. Your staff should evaluate this very carefully to establish a set of facts that more nearly reflect reality. Food Stamp allocations, per person, not in keeping demand in this administration. The cost food stamp allotment for elderly persons is more related to home ownership and subsidized housing than this seems. 75% of elderly are low income - average food stamp allotment for Americans in those categories is estimated $70 $ it per month and this has fallen about $10 / mo in this administration. All of the eligibility requirements for food stamps have been tightened in this administration, possibly resulting in both lower allotments and decreasing number of ineligible persons. It is also important to explicitly state poverty level in $, to show relationship to reality.

Please Print: NAME

ADDRESS

TELEPHONE

the number of elders at poverty level should be included - AARP table 14.2% at poverty - another 10% at 125% of poverty. this must be stated in the terms. At 37 yr for a family of two is a devastating statement and has more impact than term "poverty level". It is very important to point out that about 72% of persons over 65 at poverty level are elder women.

Thank you

Wanda Dine
Office of Senior Affairs
714 4th St
Alb N.M. 87102

United States Senate
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WASHINGTON, DC 20510

ADDITIONAL COMMENTS

SENATOR BINGAMAN:

If there had been time for me to testify at today's hearing, "The Relationship Between Nutrition, Aging, and Health: A Personal and Social Challenge," I would have said the following:

According to a research at Rutgers University, New Brunswick, NJ, it was found that Magnesium deficiency and chronic stress are linked to heart disease. Magnesium helps to relax the muscles around the blood vessels and the heart muscle. Stress causes the body to lose magnesium. Therefore, the more stress you have in your life, the more magnesium you need. Magnesium helps to prevent the build up of calcium deposits in the body and I am no longer young as I am considered elderly as I've been told countless times by some of the reporters today. My doctor says that many elderly do not have enough money to buy foods for a good diet.

Please Print: NAME Ms. Amertius "Muatis" Burroughs

ADDRESS

Albuq. N.M.

TELEPHONE

Treatment and prevention of osteoporosis in women put emphasis on hormones along with proper nutrition, or diet doesn't help. Too much only women are so much more prone to have osteoporosis than are men, (latest research of AMA)

Must have better education on nutrition in Senior Citizen programs

Our elderly who are just above the poverty line are having difficulty paying for necessities - e.g. medicine, foods, Dr. bills, shelter etc - and are not helped by any programs. Medicare is helping less all the time.

Item 5

SOUTHWESTERN
Area Agency on Aging, Inc.
NEW MEXICO

TESTIMONY SUBMITTED TO HEARING
"The Relationship Between Nutrition, Aging, and Health:
A Personal and Social Challenge."

Sponsored By The U.S. Senate
Special Committee on Aging

SUBMITTED BY:
VALERIE M. CONNER, NUTRITIONIST
AND ELISA SANCHEZ, DIRECTOR
SOUTHWESTERN NEW MEXICO AREA AGENCY ON AGING
DECEMBER 1985

Box 822 Mesilla Community Center, Suite 5, Mesilla, NM 88046 (505) 525-0352

Catron, Dona Ana, Grant, Hidalgo, Luna, Otero, Sierra and Socorro Counties

INTRODUCTION

Southwestern New Mexico Area Agency on Aging (AAA) is a private nonprofit corporation designated by the State Agency on Aging to administer the Older Americans Act in Planning and Service Area #4. The AAA serves as the advocate and visible focal point in the PSA to foster the development of more comprehensive and coordinated service systems to serve older individuals. The AAA has a commitment to assure that supportive and nutrition services are made available to older persons in communities where they live. Significantly, it is through the AAA's that most Older Americans Act services are funded, implemented, coordinated, expanded and upheld.

The following is a list of Community Based Services provided by or with the assistance of the AAA: Transportation, Outreach, Information and Referral, Escort, Homemaker, Home Delivered Meals, Chore maintenance, shopping assistance, Telephone reassurance, Congregate Meals, Health promotion/screening, Physical fitness and recreation, Legal services/continuing education, Ombudsman, Visiting. The goal of the AAA is to develop comprehensive Nutritional and Social Service Programs at the local level.

At first glance, it may appear that only two of these services are directly related to nutrition. In fact, the Nutrition Program in PSA 4 serves, or is supported by:
Transportation, Outreach, Homemaker, Home Delivered Meals, Congregate Meals, Health Promotion, and Physical Fitness services.

NUTRITION PROGRAM GOALS

Southwestern New Mexico Area Agency on Aging consists of eight (8) New Mexico Counties, including: Soccoro, Sierra, Otero, Luna, Hidalgo, Grant, Dona Ana, and Catron. The Board of Directors and Advisory Board of this Agency are representatives of all eight counties. As part of an overall strategy to improve the nutritional health of the senior citizen participants in PSA 4, the SWNMAAA hired a nutritionist at the area level for the first time ever. This position is supported with "one-time-money". In establishing a Nutrition Program through the hiring of a Nutritionist, the following seven goals were set:

1. Training of Food Service Staff.
2. Development of a six-week cycle menu and training of menu writers.
3. Providing standardized recipes for cost, portion, production and quality control, and to assure nutritional consistency at all meal sites.
4. Study the feasibility of cooperative purchasing, and implement a cooperative bidding system to assure all centers the best bid price.
5. Develop a Handbook of Nutrition Resources for Program Directors to include sources of Nutrition Education, Health Programs, and Health Professionals available to answer questions or give training.
6. Provide nutrition education to homemakers, van drivers, cooks and any other persons, such as senior citizen volunteers, so they may in turn, provide nutrition education in their respective communities.
7. Research the availability of Nutrition Educational materials in Spanish, and develop some, if none are found.

ACTIVITIES

In developing a program that will accomplish the above mentioned goals, these activities have been planned or implemented:

1. Cook Workshop Series. "Right On Target: Aiming for Excellence in Your Food Service" , a series of day-long inservice training workshops for Cooks, Cook Assistants and other food handlers was implemented as of Tuesday December 10, 1985. In planning these workshops, all of the Program Directors and most of the cooks were visited and asked for direct input. The outcome of these visits was to target the areas where training was needed or wanted the most, and to omit areas which are too complex, not directly related to the work, or do not serve the most of the Cooks. The workshop series has been approved for Continuing Education Units of credit by NMSU College of Human and Community Services. SWNNAAA sees this as recognition of the value of the partnership of education and on the job training. Of the 120 nutrition services staff , 66% felt it was important enough to them personally to pay the University registration fee to receive this credit. (See attachment #1 for complete description of Cook Workshops).

2. Menu Development. Within the first month it was determined that most of the people writing menus had little or no training in that area. Most were using an outdated menu pattern which did not take the "Dietary Guidelines for Americans" into consideration. The results of this were high fat, low fiber, often monochromatic meals which were nutritionally correct, but did not sound very appetizing. In order to correct this, appropriate authorities were contacted. The first action taken was to eliminate the old menu pattern and replace it with one more up-to-date. Second, all menu writers were asked to attend a workshop at statewide Quarterly Training provided for professionals in the aging field. This workshop introduced a new menu pattern and assisted menu writers in developing techniques for writing "better menus". For the first quarter of 1986, the menus will be written by the Nutritionist in the form of a six-week cycle to give menu writers the opportunity to continue their training before they have to begin writing menus again.

3. Cooperative Purchasing/Feasibility Study. Of eight nutrition programs, only two are large enough to gain anything by preparing and submitting competitive bid requests. With all eight programs agreeing to coordinate their purchasing, the smallest programs will benefit from the reduced prices the bidding process can provide. The method agreed upon still requires local delivery by wholesale vendors, and invoicing to be handled by the local programs. In order to control the number of items and assure an amount to the wholesalers, the PSA-wide menu pattern will be adopted at the same time as the cooperative purchasing study. Prior to implementation of the cooperative bid, a feasibility study of purchasing patterns was conducted on 12 commonly purchased products. For a two month period, it was determined that as much as 14% could be saved just on those 12 items!

4. "Senior Nutrition Advisors" There is already a formal program of this name which was developed in St. Paul, Minnesota by Ramsey Nutrition Program. It utilized volunteer senior citizens who received more than one week's training in nutrition. These volunteers are specifically trained to work with people on special diets.

In our yearly plan, a comprehensive survey of the nutrition and health needs of Nutrition Program participants is planned for Spring 1986. In order to give this hearing a preview of the nature of the questions to be asked, and to see the variety of information that can be collected from a few simple questions about eating habits we submit these results from a random survey of 80 participants in our 8 county area. We hope the survey will help us to pinpoint the specific needs of senior citizens in our area in relation to their nutritional health.

Our goal is to train the local Health Advocate and several local volunteers to use the Dairy Council's "Personalized Nutrition Plan" Adult Nutrition Program, and to use other materials addressing current issues in nutrition which will be provided to them through a subscription to several nutrition education newsletters which are geared toward the layperson. This will greatly increase compliance with the federal regulation requiring nutrition service providers to also provide regular nutrition education to participants. (Attachment #2 "Senior Nutrition Advisors" , #3 "Personalized Nutrition Plan", #4 Nutrition Survey Questions, #5 Random Sampling Survey Results/Analysis).)

5. Resource Handbook for Program Directors: On November 5th, 1985, the Program Directors for all eight counties attended aninformation and training meeting specifically geared to their needs. The Nutritionist was given two hours to address the Directors on nutrition issues. At this meeting, they were given a three-ring binder containing information in the following areas: Nutrition Education, Menu Planning, Feasibility of Cooperative Purchasing For All Programs. Quarterly Training/Nutrition Workshops, Assessments/New Standards, and "Right on Target". The Directors are requested to bring their notebooks to all training sessions, including cook workshops, directors time, and quarterly training so they may receive new and updated materials.

6. Training for Supportive Services Personnel: In early spring, training in Nutritional Assessment will be conducted for Home Delivered Meals, Homemaker, Senior Companion, and Outreach workers. The primary goal in this training is to assist workers who visit senior citizens in their homes in determining if there are any nutritional problems or needs which can be met by the local program delivering a meal, or by referral to other agencies. This training will include physical assessment of a person, ways to determine if the cooking facilities are sufficient, how to decide if there is enough food in the home, reporting procedures, and follow-up.

7. Development of Nutrition Educational Materials in Spanish. A major concern in development and implementation of goals has been how to provide the same quality of materials to staff and participants in Spanish as are available in English. For staff training, we have attempted to provide translators, and to make as much as possible of the training more visual than verbal. But what to do for the Spanish speaking participants, some of whom do not read or write in either language? An extensive search for Spanish language posters, handouts, videotapes, or other materials found little or no Spanish language material. Our next hope was to find good basic nutrition education materials for senior citizens which could easily be translated into Spanish. It didn't take long to discover that there are no audio-visual materials in English geared toward senior citizens. When TIGRE provided grant money through the Live Better Longer Task Force for Nutrition-Related projects, we applied for and were granted some funding toward production of "A Su Salud, Dona Lupe" a short video tape about basic nutrition and the meals provided at Senior Citizen Centers directed toward Spanish speaking senior citizens. Script writing and production for this film will begin after the first of the year. The tape will be a narrated
day in the life of Dona Lupe, a widowed lady who takes her noon meal at her local senior center. Narration will be by a Dona Ana County news broadcaster who is a native speaker. Translation of the script will be done by another Dona Ana county resident who is a graduate student in Spanish at NMSU. Basic four food groups, nutritional needs of an elderly person, ways to prepare food for one or two, and why it is important to care for oneself will be covered in the story. (See attachments #6 Grant Proposal for "A Su Salud, Dona Lupe" and #7 Award of Live Better Longer Grant.)

OPPORTUNITIES

We see a future advantage in the goals of the Nutritionist and the means of accomplishing them because they have a self perpetuating factor built-in.

The Cook Workshops, while being developed for only one year, will teach skills which will improve the quality of senior citizen meals, and the efficiency of those producing the meals for years to come. The few cooks in our programs who have had any formal training at all still talk about those training sessions seven years after the fact! The registration for Continuing Education Units of credit proves that the individual cook is interested in improving her abilities and furthering her career in food service.

The Program Directors will have to decide who will write the menus, if they will chose to go back to each program producing their own, to contract with a professional to write them for all programs, to take turns writing a cycle, or some other yet known solution. Their new training in writing an appetizing, easy to produce meal will help them to feel secure in their decision.

OPPORTUNITIES Con't

By April 1986 the programs will have had an opportunity to experience purchasing through a competitive bid, and the accompanying changes. There will be more decisions to be made; whether to continue with the bid exactly as implemented, to make a few changes, to reject the process, and how to keep it going if that is the final determination. The work involved will require hiring of a consultant to produce the bid requests every two months if there is no Nutritionist next year.

Senior Nutrition Advisors will be trained to use materials provided by mail, and should be able to conduct some kind of training on a regular basis for some time. If professional support is not available, new Advisors may have difficulty obtaining training.

The Resource notebook will enable local programs to find and use a number of kinds of information for Nutrition Education. It will be up to them to continue to update their notebook if the Nutritionist position cannot be funded for 1986-87.

Support staff will benefit the most from training in nutrition assessment because the information is more static, and can be used for many years. We hope that their access to this information will help them to serve the homebound senior citizen more fully.

With dedicated and motivated professionals working on "A Su Salud, Dona Lupe", promoting the video tape should bring recognition to Southwestern New Mexico Area Agency on Aging and the work being done to improve the nutritional health Spanish speaking of senior citizens in all of New Mexico.

RECOMMENDATIONS:

The SWNMAAA would like to express great concern for the continuing lack of new monies that would support administration such as a Nutritionist at the area level on a continuing basis. It is embarassing to concerned New Mexicans to admit that not only are there no local Nutritionists, there are no permanent PSA Nutritionists and no state Nutritionist in Agency on Aging programs..
The program now being developed and implemented will begin to erode the minute the current Nutritionist contract ends and no AAA support for local providers is available.
The AAA is developing a private sector funding initiative to support and augment all programs, but it will take time to bring in the money that is needed to imziement the Nutrition Program on a continuing basis.

Item 6

MY NAME IS OPHELIA RINALDI AND I'M HERE IN A DUAL CAPACITY ONE IS AS DIRECTOR OF SERVICES FOR SENIORS WITH SANDOVAL COUNTY HUMAN SERVICES, INCORPORATED AND AS BOARD MEMBER WITH THE NATIONAL HISPANIC COUNCIL ON AGING. I HAVE BEEN INVOLVED IN AGING SINCE 1976 AS A PROGRAM DIRECTOR FOR A SENIOR PROGRAM, NUTRITIONIST WITH THE STATE AGENCY ON AGING AND AS A HUMAN RESOURCE DEVELOPMENT SPECIALIST WITH THE MENTAL HEALTH BUREAU IN SANTA FE.

SANDOVAL COUNTY HUMAN SERVICES, INC., SERVES THE ELDERLY IN CORRALES, RIO RANCHO, BERNALILLO, PLACITAS, ALGODONES, JEMEZ VALLEY, CUBA AND PENA BLANCA. WE ARE CURRENTLY SERVING APPROXIMATELY 5400 MEALS A MONTH. OF THESE APPROXIMATELY 3000 MEALS ARE SERVED TO LOW-INCOME ELDERLY. ALL OF THESE ARE LOCATED IN RURAL AREAS. ALSO APPROXIMATELY 75% OF THESE ARE HISPANICS. THE PROGRAM SERVES FEW AMERICAN INDIANS AS MOST OF THESE ARE SERVED BY THE INDIVIDUAL PUEBLOS THROUGH DIRECT FUNDING FROM THE ADMINISTRATION ON AGING. SANDOVAL COUNTY RANKS THIRD HIGHEST IN TERMS OF FOOD STAMP RECIPIENTS, A LARGE NUMBER OF THESE ARE ELDERLY. THERE ARE NO STATISTICAL DATA ON INCIDENCE OF HUNGER AND MALNUTRITION AMONG THIS COUNTY'S ELDERLY. THERE HAS BEEN, HOWEVER, MUCH CONCERN BY STAFF AS TO THE ADEQUATE NUTRITION OF SOME OF OUR PROGRAM PARTICIPANTS ESPECIALLY THOSE WHO LIVE ALONE OR ARE HOME BOUND. IN SOME CASES THE MEAL RECEIVED THROUGH THE PROGRAM MAY BE THE ONLY DAILY BALANCED MEAL CONSUMED. THE HIGH COST OF LIVING HAS ERRODED THE BUYING POWER OF THE ELDERLY'S INCOME RESOURCES. MOST ARE VERY CONSCIENTIOUS OF PAYING THEIR BILLS AND VERY OFTEN RESORT TO LOW-COST FOOD ITEMS WHICH DO NOT MEET THEIR NUTRITIONAL NEEDS IN ORDER TO STRETCH THEIR DOLLARS.

MY STAFF HAS REPORTED THAT WHEN THEY HAVE TAKEN ELDERLY GROCERY SHOPPING SOME DO A LOT OF LOOKING BUT LITTLE BUYING. IF WHAT HAPPENS AMONG OUR ELDERLY LOW-INCOME HISPANICS IN SANDOVAL COUNTY CAN BE VIEWED STATE WIDE, THERE ARE PROBABLY MANY OF OUR ANCIANOS WHOSE NUTRITIONAL NEEDS ARE NOT BEING ADEQUATELY MET DUE TO PROBLEMS OF HEALTH, INCOME, TRANSPORTATION AND OTHERS. THE NUTRITION PROGRAM FOR THE ELDERLY MAY NOT SOLVE ALL THE NUTRITION PROBLEMS OF THE AGED BUT FOR THOSE PARTICIPANTS WHO REALLY NEED THAT ONE BALANCED MEAL A DAY IT MAY MEAN A BETTER QUALITY OF LIFE.